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PERSONAL.

Mr. John M. Farley, M. Am. Soc. C.E., has been appointed Chief Engineer of the water-works at White Plains, N. Y.

Mr. A. S. Dickinson, civil engineer, of Westbrook, Mass., was married Nov. 17 to Miss S. E. Hueston, of Roxbury, Mass.

Mr. William Bradburn, civil engineer, has been elected County Surveyor of Harris County, Tex., with offices in Houston.

Mr. H. H. Vreeland, President of the Metropolitan St. Ry. Co., New York city, has been elected President of the New York Railroad Club.

Mr. Samuel McCoy, civil engineer, of Independence, Mo., has been appointed an Assistant Engineer on the Choctaw, Oklahoma & Gulf R. R.

Mr. Wallace Winter has been appointed Assistant Superintendent of the Western Division of the Omaha & St. Louis R. R., with headquarters at Omaha, Neb.

Mr. T. J. Shellhorn has been appointed Master Mechanic of the Fort Worth & Rio Grande Ry., with headquarters at Fort Worth, Tex., to succeed Mr. B. G. Plummer.

Mr. Walter Edward Irving, Jun. Am. Soc. C. E., with the firm of Lewinson & Just, engineers and contractors, of New York city, was married Nov. 9, to Miss Charlotte Adela Walker, of Troy, N. Y.

Maj. Franklin C. Prindle, M. Am. Soc. C. E., Civil Engineer, U. S. N., of Brooklyn, N. Y., has been ordered to duty in connection with the establishment of a government training station on Yerba Buena Island.

Mr. Geo. R. Bottum, of Rutland, Vt., has been appointed Chairman, and Mr. Frank Wells, of Burlington, Vt., has been appointed Secretary of the Rutland-Canadian R. R., which will be built from Burlington into Canada.

Mr. Gustave R. Tuska, Assoc. M. Am. Soc. C. E., Chief Engineer of the Panama R. R. Co., left New York, Nov. 18, for Panama, to make an examination of the company's wharves, tracks, etc. He will be absent several weeks.

Messrs. J. N. Bridges, Herbert Mattison and Andrew Rinker have been appointed as a Board of Water Commissioners of Great Falls, Mont. Mr. Rinker was City Engineer of Minneapolis, Minn., from April, 1877, to January, 1893.

Mr. Walter W. Schlecht, civil engineer, has returned to Washington, D. C., from Nicaragua, where he has been with the government surveying corps on the Nicaragua Canal. He is engaged at present plotting the surveys made by the corps.

Mr. William P. Cochran, electrical engineer, of Lancaster, Pa., has been appointed Electrical Assistant to the Chief Engineer of the Martic Water & Power Co., with headquarters at Wrightsville, Pa. He graduated last June from the Pennsylvania State College.

Mr. F. J. V. Skiff, Director of the Field Columbian Museum, Chicago, Ill., has returned to that city after a visit of several months to Europe. He was recently appointed to the management of the Department of Mines and Mining at the Paris Exposition of 1900.

Mr. Harry K. Seltzer, Jun. Am. Soc. C. E., of Ephrata, Pa., has accepted the position of Instructor in Civil Engineering in the University of Texas, Austin, Tex. He graduated from Lehigh University, South Bethlehem, Pa., in 1895, and since then has been engaged in bridge work in Missouri and Iowa.

M. Charles de Wendel, steel manufacturer, of Paris, France, is visiting the United States for the purpose of studying American steel plants, especially with reference to the method of transferring molten metal from the furnaces to the converters. He visited the plant of the Johnson Co., Lorain, O., last week.

Prof. Frederick W. Denton, M. Am. Inst. Min. E., Professor of Mining Engineering in the University of Minnesota, Minneapolis, Minn., has resigned to assume the management of a large iron mine in Michigan. He is a graduate of the School of Mines of Columbia University, New York city, and has held the above professorship for the past four years.

Mr. William W. Varney, Assoc. M. Am. Inst. C. E., of Baltimore, Md., according to local papers, is to be the next City Commissioner of Baltimore. He is a graduate of the Massachusetts Institute of Technology, Boston, and studied electrical engineering in Norfolk, Va. He is also a graduate in law of the University of Maryland, and follows that profession as well as electrical engineering. His father is Naval Constructor William H. Varney, U. S. N., of Baltimore.

Mr. Wm. S. Barstow, Assoc. M. Am. Inst. E. E., General Superintendent of the Edison Electrical Illuminating Co., Brooklyn, N. Y., has been appointed General Manager of the Kings County Electric Light & Power Co., of the same city. Mr. Edward F. Peck, Assoc. M. Am. Inst. E. E., Secretary of the latter company, has been appointed Assistant General Superintendent.

Mr. Urban H. Broughton, civil engineer, of Chicago, Ill., and Mr. H. T. Wilson, formerly City Engineer of Galveston, Tex., have been appointed arbitrators of the question of transferring the entire sewerage system of the latter city from private to municipal ownership. Mr. Broughton is the arbitrator for the city and Mr. Wilson for the Galveston Sewer Co., and they will select a third person to complete the commission.

Mr. Alfred Skitt, President of the Norfolk, Virginia Beach & Southern Ry., with offices in New York city, has been elected Vice-President of the Manhattan Ry., of that city, to succeed Mr. R. M. Gallaway. Mr. Skitt was the General Superintendent of the Fourth Ave. St. Ry., of New York, until the time that it was sold to the Metropolitan Traction Co. In this new position he will be the chief executive officer of the company.

Mr. Wm. J. Clark, Assoc. M. Am. Inst. E. E., General Manager of the Railway Department of the General Electric Co., was last month appointed by the Secretary of War, one of three members of a government commission to select camp sites, report on facilities for transporting troops, etc., in Cuba, during and after the evacuation of the island by the Spanish troops. Mr. Clark has recently published a book entitled "Commercial Cuba," to which Mr. E. Sherman Gould, M. Am. Soc. C. E., of Yonkers, N. Y., has written an introduction.

Mr. Cornelius Shields, Vice-President of the Spokane Falls & Northern Ry., with offices at Spokane, Wash., has been appointed Assistant General Superintendent of the Western District of the Great Northern Ry., with headquarters at Spokane, Wash., to succeed Mr. F. H. Britton, transferred to the Dakota Division, to succeed Mr. Jas. Russell, resigned, with office at Larimore, N. D. Mr. J. M. Davis, Division Superintendent of the Breckinridge Division, with headquarters at Breckinridge, Minn., has been transferred to the Montana Division, to succeed Mr. L. D. Button, resigned, with headquarters at Havre, Mont. Mr. L. B. Allen has been appointed Assistant Division Superintendent of the Fergus Falls Division, with headquarters at Melrose, Minn., to succeed Mr. W. T. Tyler, promoted to be Division Superintendent of the Breckenridge Division, with headquarters at Breckenridge, Minn. Mr. E. E. Lillie has been appointed Assistant Division Superintendent of the Northern Division, with headquarters at Grand Forks, N. Dak., to succeed Mr. W. D. Scott, resigned.

OBITUARY.

Mr. Chas. W. Lambee, dredging contractor, of Boston, Mass., died Nov. 19, aged 44.

Mr. Hiram T. Mirick, railway and canal contractor, of Lyons, N. Y., died Nov. 10.

Mr. John Hampden Brooks, Jr., civil engineer, died at Roselands, S. C., Nov. 13, aged 32.

Mr. Lysander Wright, builder of engines and machinery, of Newark, N. J., died Nov. 12, aged 76.

Herr Herman Heinrich Meier, founder of the North German Lloyd Steamship Co., of Bremen, Germany, and New York, died in the former city Nov. 18, aged 89.

Mr. Archie S. Miller, a civil engineer, on the Nicaragua Canal Commission's engineering corps, who had just returned from Nicaragua, died in Washington, D. C., Nov. 18, of yellow fever.

Mr. William E. Hale, President of the Toledo Traction Co., Toledo, O., and formerly President of the Hale Elevator Co., died in Chicago., Ill., Nov. 16, aged 63. He leaves a son, Mr. George E. Hale, who is an astronomer and Director of the Yerkes Observatory, Chicago.

Mr. John Field, civil engineer, of Columbus, O., died Nov. 12, aged 92. He was born in New Berlin, N. Y., and went to Ohio in 1824 as an engineer on the Ohio Canal. In 1829 he was Chief Engineer of the State Dam across the Scioto River. In more recent years he engaged in the lumber business in Columbus.

Mr. Joseph Albree, father of Mr. Chester B. Albree, of the Chester B. Albree Iron Works, Allegheny, Pa., died in London, England, Nov. 7. He was born in Pittsburg, Pa., Sept. 15, 1835, and graduated from the Western University of Pennsylvania. He engaged in the shoe business until 1887, when he became a partner with his sons, Chester B. and Ralph Albree, in the manufacture of ornamental iron work in Allegheny.

Mr. Thomas Sparks Bishop, M. Am. Soc. C. E., Engineer and Assistant Treasurer of the Russell & Erwin Mfg. Co., New Britain, Conn., until last June, died in Columbus, N. J., Nov. 13. He was born in the latter place March 12, 1846, and graduated from the Polytechnic School of Pennsylvania in 1868. In 1869 he became a civil engineer with the Camden & Amboy R. R. From 1875 to 1880 he was a civil engineer on the Pennsylvania R. R., and in the latter year went to New Britain, Conn., to become the Engineer of the Russell & Erwin factory. He was appointed Assistant Treasurer of the company in 1881, and held the position until last June, when he resigned on account of ill health.

Sir John Fowler, K. C. M. G., LL. D., and Member and Past President of the Institution of Civil Engineers, died in London on Nov. 21, in his 81st year. Sir John was born near Sheffield, and was educated as an engineer in the office and in field work. Among the early railways upon which he was engaged, was the London-Brighton line. He soon acquired a very extensive practice, and built a number of bridges, viaducts, etc., in Europe as well as in England. In 1870 he investigated the Norwegian railway system for the Indian government; he also reported upon the barrage of the Nile, and acted upon many other equally important commissions. In connection with the present Sir Benjamin Baker, he was one of the engineers of the Forth bridge. He was one of the earliest members of the Institution of Civil Engineers, having been elected on Feb. 6, 1844; he was President of that body in 1866-67. He was made a Knight Commander of the Order of St. Michael and St. George, for services in connection with the Soudan campaign.

ENGINEERING SOCIETIES.

COMING TECHNICAL MEETINGS.

THE DETROIT ENGINEERING SOCIETY.
Nov. 25. "Experiences in the Engine Room of the U. S. S. 'Yosemite,'" T. H. Hinchman, Jr. Secy., Henry Goldmark, Wayne Co., Sav. Bank Bldg., Detroit, Mich.

AMERICAN SOCIETY OF MECHANICAL ENGINEERS.
Nov. 29-Dec. 2. Annual meeting, New York city. Secy., Prof. R. F. Hutton, 12 W. 31st St., New York city.

BROOKLYN ENGINEERS' CLUB.
Dec. 1. Secy., A. J. Provost, Jr., 191 Montague St., Brooklyn, N. Y.

TECHNICAL SOCIETY OF THE PACIFIC COAST.
Dec. 2. Secy., O. Von Geldern, 819 Market St., San Francisco, Cal.

BROOKLYN INSTITUTE OF ARTS AND SCIENCES.
Dec. 2. Secy., Henry I. Weed, Brooklyn Institute of Arts and Sciences, Brooklyn, N. Y.

CHICAGO ELECTRICAL ASSOCIATION.
Dec. 2. "Practical Points in Street Railway Engineering," W. A. Harding. Secy., J. R. Cravath, 825 Monadnock Block, Chicago, Ill.

ENGINEERS' CLUB OF COLUMBUS.
Dec. 3. Secy., H. M. Gates, 12½ North High St., Columbus, O.

ENGINEERS' SOCIETY OF WESTERN NEW YORK.
Dec. 5. Secy., H. J. March, Library Bldg, Buffalo, N. Y.

CIVIL ENGINEERS' SOCIETY OF ST. PAUL.
Dec 5. Secy., C. L. Annan, City Engineer's Office, St. Paul, Minn.

FRANKLIN INSTITUTE.
Dec. 6. "Reaction Velocity," Robert H. Bradbury; Dec. 13. "Commercial Photometers and Light Standards," Prof. A. J. Rowland; "The Kite as an Instrument in Meteorological Research," Prof. C. F. Marvin; Dec. 14. Fresh Studies of Pioneer Tools," Prof. H. C. Mercer. Secy., Wm. H. Wahl, 15 South Seventh St., Philadelphia, Pa.

ENGINEERS' CLUB OF ST. LOUIS.
Dec. 7. Secy., Richard McCulloch, 2401 N. Spring Ave., St. Louis, Mo.

FOUNDRYMEN'S ASSOCIATION, PHILADELPHIA.
Dec. 7. Secy., Howard Evans, Pier 45, Delaware Ave., Philadelphia, Pa.

AMERICAN SOCIETY OF CIVIL ENGINEERS.
Dec. 7. Secy., C. W. Hunt, 220 West 57th St., New York city.

WESTERN SOCIETY OF ENGINEERS.
Dec. 7. "Electrolytic Corrosion of Underground Structures," Prof. D. C. Jackson. Secy., N. L. Litten, Monadnock Block, Chicago, Ill.

CANADIAN SOCIETY OF CIVIL ENGINEERS.
Dec. 8. Secy., C. A. McNab, 112 Mansfield St., Montreal, Canada.

ENGINEERING ASSOCIATION OF THE SOUTH.
Dec. 8. Secy., C. B. Wilson, 1000 Broad St., Nashville, Tenn.

ST. LOUIS RAILWAY CLUB.
Dec. 9. Secy., H. H. Roberts, 511 Commercial Bldg., St. Louis, Mo.

MONTANA SOCIETY OF ENGINEERS.
Dec. 10. Secy., A. S. Hovey, National Bank Bldg., Helena, Mont.

THE LOUISIANA ENGINEERING SOCIETY.
Dec. 12. Secy., J. F. Coleman, 712 Union St., New Orleans, La.

ENGINEERS' CLUB OF KANSAS CITY.
Dec. 12. Secy., F. W. Tuttle, Baird Bldg., Kansas City, Mo.

DENVER SOCIETY OF CIVIL ENGINEERS.
Dec. 13. Secy., W. B. Lawson, 36 Jacobson Bldg., Denver, Col.

CIVIL ENGINEERS' CLUB OF CLEVELAND.
Dec. 13. Secy., Wm. H. Searles, Case Library Bldg., Cleveland.

NORTHWEST RAILWAY CLUB.
Dec. 13. Secy, T. A. Foque, Soo Line, Minneapolis, Minn.

NEW ENGLAND RAILWAY CLUB.
Dec. 13. Secy., Edw. L Janes, P O Box 1158, Boston, Mass.

NEW YORK RAILROAD CLUB.
Dec. 15. Secy., W. W. Wheatley, 168 Montague St., Brooklyn, N. Y.

ENGINEERS' CLUB OF CINCINNATI.
Dec. 15. Secy., J. F. Wilson, P. O. Box 333, Cincinnati, O.

SOUTHERN AND SOUTHWESTERN RAILWAY CLUB.
Dec. 15. Secy., F. A. Charpiot, P. O Box 13, Savannah, Ga.

ENGINEERS' AND ARCHITECTS' ASSOCIATION OF SOUTHERN CALIFORNIA.
Dec. 16. Secy., F. H. Olmsted, Byrne Bldg., Los Angeles, Cal.

ROCHESTER ENGINEERING SOCIETY.
Dec. 16. Secy., John F. Skinner.

NORTHWESTERN TRACK AND BRIDGE ASSOCIATION
Dec. 16. Secy., D. W. Meeker, St. Paul, Minn.

ENGINEERS' CLUB OF PHILADELPHIA.
Dec. 17. Secy., L. F. Rondinella, 1122 Girard St., Philadelphia, Pa.

ENGINEERS' AND ARCHITECTS' CLUB OF LOUISVILLE.
Dec. 19. Secy., Marshall Morris, 16 Norton Bldg., Louisville, Ky.

ENGINEERS' CLUB OF MINNEAPOLIS.
Dec. 19. Secy., H. E. Smith, 1620 S. E. 14th St., Minneapolis, Minn.

TECHNICAL CLUB OF OMAHA.
Dec. 19. Secy., J. Harry Lawrie, Omaha, Neb.
ENGINEERS' SOCIETY OF WESTERN PENNSYLVANIA
Dec. 20. Secy., R. A. Fessenden. 410 Penn Ave., Pittsburg, Pa.
WESTERN RAILWAY CLUB.
Dec. 20. Secy., F. M. Whyte, 225 Dearborn St., Chicago, Ill.
ENGINEERS' AND ARCHITECTS' ASSOCIATION OF SOUTHERN CALIFORNIA.
Dec. 21. Secy., Frank H. Olmsted, Los Angeles, Cal.
BOSTON SOCIETY OF CIVIL ENGINEERS.
Dec. 21. Secy., S. E. Tinkham, City Hall, Boston, Mass.
WESTERN FOUNDRYMEN'S ASSOCIATION.
Dec. 21. Secy., B. M. Gardner, 1522 Monadnock Block, Chicago, Ill.
AMERICAN INSTITUTE OF ELECTRICAL ENGINEERS
Dec. 28. Secy., Ralph W. Pope, 26 Cortlandt St., New York city.
AMERICAN INVENTORS' AND MANUFACTURERS' ASSOCIATION.
Jan. 15. Annual meeting, Washington, D. C. Secy., Arthur Steuart, Wash. Loan and Trust Bldg., Washington, D. C.
NORTHWESTERN ELECTRICAL ASSOCIATION.
Jan. 19-21. Semi-annual meeting, Milwaukee, Wis. Secy., Thos. R. Mercein, 511 Montgomery Bldg., Milwaukee, Wis.
MICHIGAN ENGINEERING SOCIETY.
Jan. 24-26. Annual meeting, Lansing, Mich. Secy., F. Hodgman, Climax, Mich.
ILLINOIS SOCIETY OF ENGINEERS AND SURVEYORS.
Jan. 25-27. Annual meeting, Champaign, Ill. Secy., Jacob A. Harman, Peoria, Ill.

WESTERN SOCIETY OF ENGINEERS.—At the meeting on Nov. 16, there was a brisk discussion on the several papers on "Track Elevation in Chicago," which were presented at the two previous meetings.

NEW YORK ELECTRICAL SOCIETY.—The 191st meeting of this society was held Nov. 17 at the College of the City of New York. Mr. Edward H. Johnson, President of the Sprague Electric Co., delivered an illustrated lecture on "Surface Contact Railways, with Special Reference to the Johnson-Lundell System."

MONTANA SOCIETY OF ENGINEERS.—A regular meeting of this society was held on Nov. 12, at Helena, Mont. The subject considered was a bill providing for the appointment of a State Engineer and defining his duties. Mr. F. W. Blackford, of the Butte & Centerville Electric Ry., read a paper on the subject.

LOUISIANA ENGINEERING SOCIETY.—The regular monthly meeting of this society was held Nov. 14. The paper of the evening, by Mr. A. F. Wooley, Jr., U. S. Assistant Engineer, was entitled "Rectification of the Red and Atchafalaya Rivers." In this the various projects recommended by several prominent engineers were explained in detail.

WESTERN FOUNDRYMEN'S ASSOCIATION.—At the meeting on Nov. 16 a paper by Mr. Malcolm McDowell on "Metalloids in Castings" was presented, and afterwards discussed. The paper was on the same line as Mr. McDowell's former paper on "The Value of Metalloids in Cast Iron." which was presented at the January meeting and published in our issue of Feb. 3.

AMERICAN ECONOMIC ASSOCIATION.—The annual meeting of this association will be held at New Haven, Conn., Dec. 27-29. The programme is as follows:

Dec. 27. President's address, "The Relation Between Economics and Politics," Prof. Arthur T. Hadley. Dec. 28. Report of Committee on the Twelfth Census; consideration of the subject of American Economic History. Dec. 29. Report of Committee on Reform of Currency; also "Some Aspects of the Recent U. S. Treasury Situation," Prof. F. F. Taussig; Discussions of—Labor Problems in France, Municipal Taxation as a Means of the Public Control of Corporations, and the Nature of Municipal Franchises.

WESTERN RAILWAY CLUB.—At the meeting on Nov. 15, Mr. F. M. Whyte read a paper on "The Framing of Cars," the object of which was to show the necessity of modifying the design, and especially the trussing, so as to transmit as much of the load as possible to the center plate and so reduce the trouble arising from the deflection of the bolsters.

The first topical discussion was on "Methods of Handling Ashes from Locomotive Ash Pits," in which there was some opposition to mechanical methods, on account of the cheapness of shoveling by hand. This was followed by a brief discussion on "Improved Means for Drying Sand and for Delivering it to the Sand Box on the Locomotive."

NEW PUBLICATIONS.

SEWERAGE AND MUNICIPAL SANITATION.—A Paper Read Before the Annual Convention of the Mayors' Association of South Carolina, held at Georgetown, S. C., May 10-12, 1898. By J. L. Ludlow, M. Am. Soc. C. E., Winston, N. C. Printed for Private Circulation. Paper; 6 x 9 ins.; pp. 15.

If there were more such conventions with more such papers, as that noted above, municipal sanitation would advance even more rapidly than it has during the last few years. The South, especially, has need of just such educational work, but no part of the country is beyond the need yet.

ILLINOIS SOCIETY OF ENGINEERS AND SURVEYORS. —Report of the 13th Annual Meeting, held at Peoria, Ill., Jan. 26, 27 and 28, 1898. Jacob A. Harman, Secretary, Peoria, Ill. Paper; 6 x 9 ins.; pp. 198; illustrated. Price, 50 cents.

The papers and committee reports in this volume most likely to be of greatest interest to our readers are as follows: "The Purification of Sewage by the Ferozone and Polarite System," by John W. Alvord; "Deep-Well Pumping," by E. E. Johnson; "The Improvement of Transportation in Country Districts," by E. E. R. Tratman; "Brick and Macadam Country Roads," by J. Ed. Miller, Monmouth; "Proposed State Supervision of Water Supply and Sewage Disposal," by Jacob A. Harman; Reports of Committees on Public Highways, Water-Works and Paving Brick Specifications and Tests. Appended to the report is a state directory of surveyors and civil engineers.

NEW YORK WEATHER BUREAU.—Eighth Annual Report. 1896. Under the Department of Agriculture, and in co-operation with the U.S. Weather Bureau. Created and organized under the Laws of the State of New York (Chapter 148, Laws of 1889). Reorganized and placed under the Department of Agriculture (Chapter 328, Laws of 1893). Central office at Cornell University, Ithaca, N. Y. State Printers. Cloth; 9 x 5½ ins.; pp. 525. Many maps.

The central office of this bureau says that the distribution of this report has been delayed by reasons beyond the agency of control of that office. The contents cover the meteorological reports for each month in 1896, and separately summarize these for the year; the stations are described, a sample crop report is given, and a separate chapter deals with the climate of the state of New York. A generally interesting map and description is one devoted to the physical features of New York, giving elevations of the surface above sea-level, from data secured in geological and state surveys and railway levels.

TRADE PUBLICATIONS

(The standard sizes for pamphlets and trade catalogues recommended by all the principal engineering societies of the United States are: 8 1-2 x 6 ins.; 6 x 9 ins., and 9 x 12 ins.)

POWER PUMPS.—The Goulds Mfg. Co., Seneca Falls, N.Y. Paper; 8 x 7 ins.; pp. 92; illustrated.

This is a handsome descriptive catalogue of power pumps designed, the title page states, "for every service." There are also some useful tables.

SPECIAL MUNICIPAL SUPPLIES.—Henry W. Atwater, Manager, Imperial Building, Montreal, P. Q. Paper; 8 x 10 ins.; pp. 28; illustrated.

This catalogue describes a garbage incinerator, automatic gully or catchbasin cleaner, fire hose attachment, valves, pipe couplings, etc., made under the Decorie patents.

RECENT BALDWIN LOCOMOTIVES.—Baldwin Locomotive Works, Philadelphia, Pa. Pamph.; 9 x 6 ins.; pp. 32; illustrated.

This is No. 8 of the regular series of pamphlets which are being issued by the above firm illustrating and describing briefly the locomotives built by them to fill recent orders. Altogether the present number illustrates 15 different locomotives, including, besides the regular steam railway types, a number of mining, plantation and switching locomotives. Most of the engines shown were built to foreign orders, principally from the Central and South American countries, China, Russia and Australia, but there is one from the Lynton & Barnstaple Ry., in England itself.

HISTORIC RICHMOND.—Devoe & Raynolds Co., Chicago, Ill. Leather, 8½ x 6 ins.; ten photographs, with descriptive captions.

This is a portfolio of ten handsome photographs of buildings, statues, street scenes, etc., in Richmond, Va., which are of interest for their historical associations, and has been issued by the above firm as a souvenir of the sixth annual convention of the Association of Railway Superintendents of Bridges and Buildings, held at Richmond, Oct. 18-20, 1898 (Eng. News, Oct. 11, 1898).

MINING MACHINERY AND PLANT.—Gates Iron Works, 650 Elston Ave., Chicago. Paper; 6 x 9 ins.; pp. 130.

This very handsome specimen of trade publications is the company's general catalogue, covering the wide and varied field of its manufactures. It shows the various styles of the Gates, Blake & Dodge crushers for rock, ore, etc., and also different styles of crushing rolls. Then come ore feeders, stamp mills, the Tremain steam stamp mill, rotary driers, vanners, amalgamator pans, concentrators, etc. Smelting and roasting furnaces (the latter being of the rotary type) are shown. Engines, mining hoists, mine and dump cars, conveyors, etc., are included. The catalogue is illustrated by excellent half-tone engravings of the various machines, and views showing mills which have been equipped by this firm.

COAL MINING MACHINERY.—Sullivan Machinery Co., 58 N. Clinton St., Chicago, Ill. Catalogue No. 32. Pamph.; 9 x 6 ins.; pp. 20.

This catalogue illustrates the Sullivan coal undercutting and shearing machines, driven by compressed air. The undercutter is made in four sizes, weighing from 500 to 800 lbs., and capable of undercutting from 4½ to 6 ft. The shearing machine is a new departure in coal mining machinery. It makes a vertical cut in the face of the breast 6 ins. wide, 7 to 8 ft. deep and of the height of the coal seam.

CONSTRUCTION NEWS.

CONDENSED LIST OF CONTRACTS PENDING WITH DATE OF OPENING BIDS.

Bids to be opened.	Work.	Place.	See Eng. News.
Nov. 24.	Asphalt paving,	Reading, Pa.	Nov. 24
Nov. 24.	Lift bridge,	Utica, N. Y.	Nov. 24
Nov. 25.	Sewer,	Ballston Spa, N. Y.	Nov. 24
Nov. 25.	School building,	Boston, Mass.	Nov. 24
Nov. 25.	Fire hose,	Seattle, Wash.	Nov. 24
Nov. 25.	Pipe sewers,	Pittsburg, Pa.	Nov. 24
Nov. 25.	Water pipe, etc.,	Honolulu, H. I.	Oct. 27
Nov. 25.	Rebuilding wall,	New York, N. Y.	Nov. 10
Nov. 25.	Cleaning streets,	Cleveland, O.	Nov. 10
Nov. 25.	Portable pump,	Cleveland, O.	Nov. 17
Nov. 25.	Sewer connections, etc.,	N. Soldiers' Home.	Nov. 17
Nov. 26.	Court house,	Danbury, Conn.	Nov. 17
Nov. 26.	Boilers,	Brooklyn, N. Y.	Nov. 10
Nov. 25.	Pipe sewers,	Pontiac, Mich.	Nov. 17
	Advertised, Engineering News, Nov. 17.		
Nov. 26.	Crane,	Port Royal, S. C.	Oct. 27
Nov. 26.	Sawmill, chimney, etc.,	Mare Island, Cal.	Nov. 3
Nov. 26.	Steam heating, etc.,	Bath, N. Y.	Nov. 24
Nov. 26.	Gun forgings,	Washington, D. C.	Nov. 24
Nov. 26.	Lighting fixtures, etc.,	Bath, N. Y.	Nov. 24
Nov. 28.	Street work,	New Orleans, La.	Nov. 24
Nov. 28.	Sidewalks, etc.,	Kansas City, Mo.	Nov. 24
Nov. 28.	Sidewalks, grading, etc.,	Indianapolis, Ind.	Nov. 24
Nov. 28.	Grading St. Paul,	Minn.	Nov. 24
Nov. 28.	Canal work, etc.,	Albany, N. Y.	Nov. 24
Nov. 28.	Iron bridge,	Albany, N. Y.	Nov. 24
Nov. 28.	Bell tower,	New Orleans, La.	Nov. 24
Nov. 28.	Electric light plant,	Reading, Pa.	Nov. 24
Nov. 28.	Removing wreck,	Port Chester, N. Y.	Nov. 3
	Advertised, Eng. News, Oct. 27 to Nov. 17.		
Nov. 28.	Water-works,	Florence, Colo.	Nov. 3
	Advertised, Eng. News, Nov. 3 and 10.		
Nov. 28.	Sewers,	North Bend, Ind.	
Nov. 28.	Heating plant,	Henderson, Colo.	Nov. 3
Nov. 28.	Tubular boilers, (2),	San Francisco, Cal.	Nov. 3
Nov. 28.	Electric plant,	Denver, Colo.	Nov. 10
Nov. 28.	Mailing platform and shed,	New York.	Nov. 10
	Advertised, Eng. News, Nov. 10 and 17.		
Nov. 28.	Street bonds,	Wellston, O.	Nov. 17
Nov. 28.	Cast-iron pipe sewer,	New York.	Nov. 17
Nov. 28.	Boilers, machinery, etc.,	Detroit, Mich.	Nov. 17
	Advertised, Eng. News, Nov. 17 and 24.		
Nov. 29.	Sewers, etc.,	Red Bank, N. J.	Nov. 17
	Advertised, Engineering News, Nov. 17.		
Nov. 29.	Condenser tubes,	Mare Island, Cal.	Nov. 10
Nov. 29.	Scales, etc.,	Washington, D. C.	Nov. 10
Nov. 29.	Drain tile,	Philo, Ill.	Nov. 17
Nov. 29.	Water-works,	Ft. Berthold, N. Dak.	Nov. 3
Nov. 29.	Pipe sewers,	Buffalo, N. Y.	Nov. 24
Nov. 29.	Asphalt paving, etc.,	Jersey City, N. J.	Nov. 24
Nov. 29.	Macadamizing,	Morristown, N. J.	Nov. 24
Nov. 29.	Granolithic sidewalks,	Louisville, Ky.	Nov. 24
Nov. 29.	Naval supplies,	Washington, D. C.	Nov. 24
Nov. 30.	Water-works,	Wamego, Kan.	Nov. 24
Nov. 30.	Dry dock,	Algiers, La.	Oct. 20
Nov. 30.	Bridge, etc., and plans,	Moline, Ill.	Oct. 6
	Advertised, Eng. News Oct. 6 and 13.		
Nov. 30.	Water-works,	McKinney, Tex.	Nov. 10
Nov. 30.	Steel arch bridge,	Victoria, B. C.	Nov. 10
Nov. 30.	Temporary drain,	New York.	Nov. 3
Nov. 30.	Power plant,	Orillia, Ont.	Nov. 17
Dec. 1.	Suction pipe, etc.,	Three Rivers, Que.	Nov. 17
Dec. 1.	Electric plant,	Somerville, Tenn.	Nov. 17
Dec. 1.	Water-works,	Somerville, Tenn.	Nov. 17
Dec. 1.	Power plant,	Brandon, Vt.	Nov. 17
Dec. 1.	Electric light plant,	Clinton, Ill.	Nov. 10
Dec. 1.	Business building,	Cleburne, Tex.	Nov. 10
Dec. 1.	Seawall,	S. I., N. Y.	Nov. 10
	Advertised, Eng. News, Nov. 10 and 17.		
Dec. 1.	Electric lighting,	Sumter, S. C.	Oct. 6
Dec. 1.	Electric light plant,	Clinton, Ill.	Oct. 13
Dec. 1.	Brick sewer,	Buffalo, N. Y.	Nov. 24
Dec. 1.	Court-house plans,	Lafayette, Ala.	Nov. 24
Dec. 1.	Street bonds,	Wilkinsburg Pa.	Nov. 24
Dec. 1.	System of clocks,	Troy, N. Y.	Nov. 24
Dec. 1.	Turnpike bonds,	Winchester, Ky.	Nov. 24
Dec. 2.	Pine timber,	New York, N. Y.	Nov. 24
Dec. 2.	Paving,	Omaha, Neb.	Nov. 24
Dec. 2.	Granite stones,	New York, N. Y.	Nov. 24
Dec. 2.	Pipe sewers,	Mason City, Ia.	Nov. 24
	Advertised, Engineering News, Nov. 24.		
Dec. 2.	Arc lighting,	Asheville, N. C.	Oct. 13
Dec. 3.	Wooden or iron bridge,	Rome, Ga.	Nov. 24
Dec. 5.	Pipe sewers,	Toledo, O.	Nov. 24
Dec. 5.	Supplies,	Toronto, Ont.	Nov. 24
Dec. 5.	Buckeye paving,	Toledo, O.	Nov. 24
Dec. 5.	Grading,	Seattle, Wash.	Nov. 24
Dec. 5.	Bridges (7),	Leavenworth, Kan.	Nov. 24
Dec. 5.	Valves, pipe, etc.,	Toronto, Ont.	Nov. 24
Dec. 5.	Street cleaning, etc.,	Philadelphia, Pa.	Nov. 24
Dec. 5.	Stone heads,	Newark, N. J.	Nov. 24
	Advertised, Eng. News, Nov. 17 and 24.		
Dec. 5.	Bulkhead and filling,	Boston, Mass.	Nov. 24
Dec. 5.	Wall,	Boston, Mass.	Nov. 24
Dec. 5.	Pumping engine,	Oil City, Pa.	Oct. 27
	Advertised, Eng. News, Oct. 27 to Nov. 10.		
Dec. 5.	Removing wreck,	Philadelphia, Pa.	Nov. 10
Dec. 5.	Water-works,	West Tampa, Fla.	Nov. 10
	Advertised, Eng. News, Nov. 10 to 24.		
Dec. 5.	Court house,	Garner, Ia.	Nov. 10
Dec. 6.	Canal,	Tampico, Ill.	Nov. 10
	Advertised, Eng. News, Nov. 10 to Dec. 1.		
Dec. 6.	Street bonds,	Springfield, O.	Nov. 3
Dec. 6.	School building,	Sacramento, Cal.	Nov. 17
Dec. 6.	Steam heating,	New Brighton (S.I.), N. Y.	Nov. 24
Dec. 6.	Water-works,	East Grand Forks, Minn.	Nov. 24
Dec. 6.	Pipe sewers,	St. Louis, Mo.	Nov. 24
Dec. 6.	Electric light plant,	E. Grand Forks, Minn.	Nov. 24
Dec. 7.	Dredging,	New York Bay, N. Y.	Nov. 24
Dec. 7.	Electric light plant,	New Richmond, O.	Nov. 24
	Advertised, Eng. News, Nov. 24 and Dec. 1.		
Dec. 7.	Water-works,	New Richmond, O.	Nov. 24
	Advertised, Eng. News, Nov. 24 and Dec. 1.		
Dec. 7.	Changing Van Buren St. bridge,	Chicago, Ill.	Oct. 20
Dec. 7.	Torpedo storehouse,	Fort Caswell, N. C.	Nov. 10
	Advertised, Eng. News, Nov. 10 to Dec. 1.		
Dec. 8.	Bridge approach,	Zanesville, O.	Nov. 10
Dec. 8.	Police patrol system,	Youngstown, O.	Nov. 24
Dec. 9.	Fire hose,	Buffalo, N. Y.	Nov. 24
Dec. 10.	Intercepting sewers,	Washington, D. C.	Nov. 3
	Advertised, Engineering News, Nov. 3.		
Dec. 10.	Crane (100 tons capacity),	Brooklyn, N.Y.	Nov. 10
Dec. 12.	Paving, curbing, etc.,	Dayton, O.	Nov. 17
Dec. 12.	Boilers for dredges,	Honolulu, H. I.	Nov. 24
Dec. 13.	School building,	Washington, D. C.	Nov. 24
Dec. 13.	Purchase of power franchise,	Stockton, Cal.	Nov. 24
Dec. 15.	Church building,	Webster City, Ia.	Nov. 24
Dec. 15.	Court house,	Austin, Minn.	Nov. 24
Dec. 15.	Storm sewers,	Denver, Colo.	Oct. 13
Dec. 17.	Macadam roads (20 miles),	Crown Point, Ind.	Nov. 24
	Advertised, Engineering News, Nov. 24.		
Dec. 19.	Tunnel sewer,	Newburg, N. Y.	Nov. 17
	Advertised, Eng. News, Nov. 17 and 24.		
Dec. 20.	Revetments,	Keweenaw Point, Mich.	Nov. 24
	Advertised, Eng. News, Nov. 24 to Dec. 15.		
Dec. 21.	Court house annex,	Atlanta, Ga.	Nov. 3
Dec. 22.	Bridge superstructure,	Lorain, O.	Nov. 10
	Advertised, Eng. News, Nov. 10 and 17.		
Dec. 23.	Light station,	Tompkinsville, (S.I.), N. Y.	Nov. 17
	Advertised, Eng. News, Nov. 17 and 24.		
Dec. 28.	Railway bridge,	Chicago, Ill.	Nov. 24
	Advertised, Engineering News, Nov. 24.		
Dec. 31.	Plans for station, etc.,	Stockholm, Sweden.	June 23
Jan. 1.	City hall plans,	Bridgeport, Conn.	Aug. 18
Jan. 1.	Draw bridge,	Cathlamet, Wash.	Nov. 17
Jan. 1.	Water-works,	Pasadena, Cal.	Nov 17
Jan. 2.	Bridge,	Quebec, Que.	Sept. 29
	Advertised, Eng. News, Sept. 29 and Oct. 6.		
Jan. 2.	Arc lighting,	Vincennes, Ind.	Oct. 27
Jan. 3.	Steel bridge,	Brookhaven, Miss.	Nov. 24
Jan. 6.	Water-gas plant,	Johannesburg, So. Africa.	Oct. 27
Jan. 6.	Extension, electric plant,	Johannesburg, S. Af.	Oct. 27
Jan. 9.	Repairing curb, etc.,	Houston, Tex.	Nov. 24
Jan. 14.	Park work and plans,	Philadelphia, Pa.	Nov. 17
Jan. 24.	Footway tunnel,	London, England.	Nov. 10

Feb. 2. Electric lighting, New Orleans, La. .....Nov. 3
Feb. 10. Jail building, Keyser, W. Va. .....Sept. 29
Mar. 15. Electric railway (23 miles), Shanghai, China. Nov. 24
Advertised, Eng. News, Nov. 17 to Dec. 8.
Mar. 31. Telephone concession, Shanghai, China, ...Nov. 24
Advertised, Eng. News, Nov. 17 to Dec. 8.
Apr. 30. Water-works, Persia, Ia. .....Nov. 17

RAILWAYS.

CHEROKEE MINING CO.—Reports state that this company, care of C. W. Howard, Times Bldg., Chattanooga, Tenn., will be in the market for a standard gage locomotive, a road-grading machine, and the necessary tools for railway construction.

CHICAGO, ST. LOUIS & TEXAS AIR LINE.—D. Griffin Gunn, Pres., San Antonio, Tex., informs us that the surveys have been completed, the right of way guaranteed and bonuses amounting to about $450,000 promised for this proposed railway from San Antonio to Brownsville, Tex., via San Diego, a distance of 275 miles. The cost of construction will be about $10,000 a mile. There will be but few bridges required, and no heavy grading will be met with as the route is through a prairie and small mosquito timber district. The contract for the entire work will be let to responsible parties, to be paid for in cash when completed.

CHOCTAW & MEMPHIS.—Among the bidders Nov. 12 for the construction of this company's new line from Howe, Ind. Ter., to Little Rock, Ark., a distance of 164 miles, were the following: J. H. McCarthy & Co., Little Rock; G. M. Garvey, Memphis, Tenn.; Edward A. Garvey, St. Louis, Mo.; Johnson Bros., St. Elmo, Ill.; Donald Grant & Co., Faribault, Minn.; R. M. Quigley, St. Louis; Mason Hoge & Co., Frankfort, Ky.; M. C. Hurley, Fort Worth, Tex.; J. W. Thompson, St. Louis; Corrigan & Lee, Kansas City, Mo.; St. Joe Construction Co., St. Joseph, Mo.; W. P. Chapman Co., 40 Wall St., New York; Ferguson Contracting Co., 69 Wall St., New York; J. S. Sherman, Utica, N. Y. J. H. McCarthy and Johnson Bros. are said to have been the successful bidders; estimated cost, about $2,000,000. F. A. Molitor, Ch. Engr., Little Rock.

COLORADO & SOUTHERN.—Reports state that the Union Pacific, Denver & Gulf, the Denver, Leadville & Gunnison (known as the South Park Line), and the Denver, Texas & Gulf Rys., and branch lines, are to be reincorporated, under the name of the Colorado & Southern Ry. Co., with Frank Trumbull, Denver, Colo., as President, and B. L. Winchell as General Traffic Manager.

CUBA.—Press reports state that within several weeks work will be commenced, under Col. Hecker's directions, upon a railway from Casa Blanca, on the east side of Havana Bay, to Guanabacoa, where it will connect with the tracks of the United R. R., thus facilitating the transportation of commissary supplies.

DALLASTOWN.—S. M. Manifold, of York, Pa., who is chief engineer of the York Southern R. R., is said to have been awarded the contract for the construction of this line near Dallastown, Pa., to be 1 1-10 miles in length, at $11,580. The grading work has been sub-let to John Doblings. D. F. Lafean, Pres., York, Pa.

FLORENCE & GULF.—Interest is now being revived for the construction of this proposed railway from Florence to Mobile, Ala. Several years ago surveys were made under the supervision of the state for a line which will tap the Great Warrior coal fields at Tuscaloosa, passing through the long leaf yellow pine regions and the black lands of the southern part of Alabama. It is said to be the intention of those behind the project to build to Chicago. R. T. Simpson, Jr., of Florence, Ala., is the representative of the line for Lauderdale and Colbert counties.

FORT DODGE & OMAHA.—Jas. H. McShane, of Omaha, Neb., is stated to have been awarded the contract for grading this proposed line between Omaha and Loveland, and that he expects to have work completed in time to lay rails by April 1. This line will be an extension of the Illinois Central Ry., from Fort Dodge, Ia., to Omaha, 125 miles.

LAKE ERIE & DETROIT RIVER.—This company has been voted bonuses at St. Thomas, Ont., Dutton and other towns. It is expected to build an extension from Ridgetown to St. Thomas in the spring to a connection with its London & Port Stanley branch. Owen McKay, Engr., Windsor, Ont.

MONTEREY & FRESNO.—H. A. Greene, Vice-Pres. and Gen. Mgr., Monterey, Cal., informs us that a contract has been signed for the completion of this road as far as Hollister from Monterey; also the contract for rails, etc. A. W. Jones, Pres.; P. P. Dandridge, Ch. Engr., both of Monterey.

MUSCATINE, NORTH & SOUTH.—Grove M. Willis, Ch. Engr., Wapello, Ia., informs us that the location has been completed and entire right of way obtained for this railway, from Elrick to Muscatine, via Wapello, Grand View and Fruitland, 30 miles. Balch, Peppard & Johnson, Minneapolis, Minn., received the contract July 13, and now have 10 miles of track laid and the balance nearly graded and bridged ready for track. The station buildings have been erected. Pres., W. R. Stewart, New York.

NELSON & BEDLINGTON.—Reports from Nelson, B. C., state that Folliet & Guthrie have been awarded the contract for the construction of this new line from Bonner's Ferry, Idaho, to Nelson, a distance of about 60 days. Jas. J. Hill, Pres. of Great Northern, St. Paul, Minn., is interested.

OHIO.—The Cincinnati, Hamilton & Dayton, the Wheeling & Lake Erie and the Lake Shore & Michigan Southern Ry. Cos. are reported to be contemplating the purchase of Presque Isle, at the mouth of the Maumee River, Toledo, O., for use as a terminal during the Ohio Centennial. If the deal is consummated a large railway bridge will have to be erected.

PENNSYLVANIA.—Reports state that P. E. McGovern, Clearfield, Pa., has begun the construction of a railway for N. L. Hoover & Co., from a point near Glen Campbell, Pa., six miles west to a lumber tract owned by N. L. Hoover and John Du Bois. Mr. McGovern will employ about 200 men, and expects to have the road completed by about Jan. 15. The line will penetrate valuable timber and coal lands.

PHILADELPHIA, READING & NEW ENGLAND.—It is announced that the Poughkeepsie bridge route of this company was to be transferred to the bondholders on Nov. 15, and that the new company will be known as the Central New England. John W. Brock, of Philadelphia, will continue as president, and bids will be asked for building an extension to Springfield, Mass. C. H. Ewing, Ch. Engr., Hartford, Conn.

PORTLAND, VANCOUVER & YAKIMA.—Bids will soon be asked, according to reports, for the construction of an extension of this line to a point on the Chelatchie prairie. Plans are now in preparation. L. Gerlinger, Pres.; J. W. Coovert, Ch. Engr., both of Vancouver, Wash.

PIONEER MFG. CO.—J. H. Adams, Thomas, Ala., informs us that Dunn & Lallande Bro. are the principal contractors, as stated in our last issue, for the construction of 3½ miles of track to be built for the Pioneer Mining & Mfg. Co. from its furnaces at Thomas to coal mines at Sayreton. Edwin Thomas, Pres., Catasauqua, Pa.; P. S. Milner, Ch. Engr., Birmingham, Ala.

RUSSIA.—Press reports state that a new line is projected in Russia to run from Tscheljabinsk, the western terminus of the Trans-Siberian Ry., to Zarizyn, on the Volga, via Orenburg and Uralsk. The purpose of the road is to connect the wheat region of Western Siberia with a Black Sea port.

SUMTER & WATEREE.—R. D. Lee, Sumter, S. C., informs us that contracts to build this line are about to be let. The right of way has been secured and the surveys made. The route is from Sumter to Middleton, a distance of 15 miles. J. D. Blanding, Pres.; F. B. Beckar, Ch. Engr., both of Sumter.

TERRE HAUTE & LOGANSPORT.—J. T. Brooks, of the Pennsylvania Co., Pittsburg, Pa., is reported to have bought this line at a Master's sale, Nov. 18, at $1,000,000.

TRAIL & SALMON RIVER.—Application will be made to the legislative assembly of the Province of British Columbia for an act to incorporate this company with power to construct and operate either a standard or narrow gage railway from Trail to Sayward and to the junction of the Salmon River with the Pen D'Oreille River. Frank Fletcher, Pres.; Frank Moderly, Ch. Engr., Vancouver.

WARSAW & VIENNA.—Press reports state that this railway company will soon be in the market for a number of new locomotives, in addition to the 32 recently bought in America.

WEST BRANCH VALLEY.—This company was incorporated in Pennsylvania, Nov. 7, with a capital stock of $1,100,000, to construct a steam railway from Clearfield to Williamsport, Pa., along the Susquehanna River, a distance of about 111 miles. At Clearfield a connection will be made with the Buffalo, Rochester & Pittsburg Ry. It will have a low-water grade all the way and will therefore be the most economical route through Central Pennsylvania. It is thought that this will be part of a new trunk line through the state. A. E. Patton, Pres., of the Pennsylvania Construction Co., Curwensville, Pa.; H. B. Powell, Vice-Pres., Clearfield; F. J. Dyer, Treas., Curwensville.

WESTERN RY. CONSTRUCTION.—Bryan W. Tichenor, 27 Pine St., New York, informs us that this company proposes to construct a railway from Altata to Durango, via Culiacán and La Bajada, Mexico, 700 miles, of which 40 mile are now in operation between Altata and Culiacan. The route has been surveyed, a concession granted and negotiations for capital are pending. Further statement of facts cannot be made at present. The promoters are R. J. Hartman, Mexico City, Mex., and J. R. Newberry, Los Angeles, Cal.

WEST SHORE & EASTERN.—Press reports state that E. Woolford, of Pittsburg, is now making a permanent location for this proposed line from North Charleroi to the Youghiougheny River, near the Washington mines, via Allenport, Pa.

WISCONSIN CENTRAL.—This company has received judicial sanction to the issuance of $1,000,000 in bonds. It is said that the receivers will now purchase new equipment and buy considerable new rolling stock. H. F. Whitcomb, Recr. and Gen. Mgr., Milwaukee, Wis.

STREETIAND ELECTRIC RAILWAYS.

HAMPTON, N. H.—Soule, Dillingham & Co., 8 Oliver St., Boston, Mass., contractors for the track and overhead construction work of the proposed Hampton & Amesbury St. Ry., inform us that all orders have been placed and construction work begun between Hampton and Seabrook, a distance of five miles. W. D. Lovell., Treas., 143 Federal St., Boston.

MONTPELIER, VT.—Reports state that the Hoosac Power & Traction Co. has been incorporated in Vermont.

FITCHBURG, MASS.—The council granted a franchise to the Fitchburg & Leominster St. Ry. Co., Nov. 15, to double track its Main St. line from Putnam St. to the upper common, and to build a line up Blossom and connecting streets. H. A. Willis, Pres.; A. H. Moore, Ch. Engr.

WEST SPRINGFIELD, MASS.—The selectmen of this town have granted a franchise to the Springfield St. Ry. Co., to build from the old toll bridge to the Agawam bridge, conditional upon the company constructing a line to connect the Bridge St. location with that at West Springfield Center. J. Olmstead, Pres., 1 Main St., Springfield.

WESTBORO, MASS.—The Westboro, Hopkinton & Milford St. Ry. Co., capitalized at $80,000, has petitioned this town for a franchise. Wm. H. Tylee, Worcester, Mass.; Edgar K. Ray, Franklin, Mass., are interested.

WILLIMANTIC, CONN.—Jesse Starr, Room 2, Unity Bldg., Hartford, Conn., informs us that he is in the market for material to fully equip ten miles of electric railway in this town. L. B. Wilson, of Hartford, is said to be the engineer.——The Willimantic St. Ry. Co. has recently been incorporated, with a capital stock of $1,000, by Eugene S. Boss, J. Griffin Martin and Solomon Lucas.

NEW YORK, N. Y.—The Fort George Extension Ry. Co. was incorporated at Albany, Nov. 17, with a capital stock of $10,000, to operate an electrical surface line from 172d to 185th St., on 11th Ave. The directors are: M. G. Starrett, W. F. Plummer, John Lambdon, Andrew Loughlin, D. W. Patterson and Harry Hartwell, of New York; John Kerr and Charles E. Corby, of Brooklyn; and H. A. Himely, Far Rockaway (L. I.), N. Y.——Papers were filed, Nov. 21, consolidating the North End St. Ry. Co., the Fort George & 11th Ave. R. R. Co., and the Fort George Extension Ry. Co., under the name of the Fort George & 11th Ave. R. R. Co.; capital stock, $3,000,000. Its directors are: John T. Little, Jr., Ambrose F. McCabe, Frederick C. Garrick, Frank F. Ogston and Sharon Graham, of New York; Clement M. Cumming, Yonkers, N. Y.; C. A. Gilbert, White Plains, N. Y.; W. A. Dibbs, of Brooklyn, N. Y., and D. C. Moorehead, of Jamaica (L. I.), N. Y.

ROCHESTER, N. Y.—It is reported that the Rochester & Lake Ontario Ry., leased by the Rochester & Irondequoit R. R. Co., will be double-tracked between Rochester and Lake Ontario and the motive power changed from steam to electricity. J. N. Beckley, Pres., Rochester.

SYRACUSE, N. Y.—The time for the completion of the Syracuse & Oneida Lake R. R. has been extended from Dec. 15, 1898, to Dec. 15, 1899, by resolution offered by Alderman Matty.

LODI, N. J.—Sandford & Stillman Co., Jersey City, N. J., were awarded the contract, Nov. 11, according to reports, for building a trolley line from Garfield to Lodi, at $48,000, and also for erecting a bridge, at $5,000; time, 60 days.

ERIE, PA.—It is reported that agreements have been made by the Erie Transit Co. and contractors looking to the construction of an electric line connecting Edenboro, Erie and Cambridge before June 1. All franchises are granted except in Erie City and Summit township. J. F. Downing, Pres., Erie.

IRWIN, PA.—The council has been petitioned by the McKeesport & Irwin St. Ry. Co. for a franchise to build through the town.

PITTSBURG, PA.—The Consolidated Traction Co. is said to be making extensive improvements on its Sharpsburg and Etna branches, and to be contemplating the building of several extensions up the Allegheny Valley. C. L. Magee, Pres., Times Bldg.

PITTSTON, PA.—Jas. A. Steese, Pres. Pittston & Scranton St. Ry. Co., Mount Holly Springs, Pa., informs us that this company, whose incorporation was noted in our last issue, expects to build a short line about 2½ miles in length. No surveys have yet been made.

SCRANTON, PA.—The Nay-Aug Park St. Ry. Co. was incorporated Nov. 17, with a capital stock of $50,000, to construct an electric street railway in this city. The incorporators are: Jas. L. Crawford, Pres.; Geo. F. Reynolds, Geo. E. Hill, Clarence E. Reynolds and Thos. F. Penman, all of Scranton.

CUMBERLAND, MD.—The commissioners of Allegany county have granted an extension of time to Dec. 1 for the commencement of surveys of the new line between this place and Westernport, projected by J. W. Burchinal, of Moundsville, W. Va.; Marx Wineland, of Frostburg, Md.; Hugh Scott and William Atkinson, of Lonaconing, Md. Engr., G. D. Howell, Philadelphia, Pa. Construction work will not begin until next spring.

WASHINGTON, D. C.—O. T. Crosby has bought the franchises and other property of the Belt Ry. Co., including about 16 miles of single track lines, at $350,000. The road has to be equipped with the underground electric system within one year.——The plant of the Potomac Electric Power Co. is being prepared to furnish power for the City & Suburban St. R. R. Co., formerly the Eckington & Soldiers' Home Ry. Co. O. T. Crosby, Pres.

PETERSBURG, VA.—S. Kaufman, of Charlotteville, N. C., representing the bondholders, is reported to have bought the property of the Petersburg Electric Ry. Co., at public auction, Nov. 11, at $5,500. It is said that the system will be merged into that projected by the Piedmont Traction Co., of Charlotteville.

GADSDEN, ALA.—The Gadsden & Attala Union Ry. will soon be changed from a dummy line to an electric system, at a cost of about $10,000. The total length of the line is 11.25 miles. The power will be furnished by the Alabama Light & Power Co., W. S. McCall, Pres., which intends to begin at once the erection of a $25,000 electric light and power plant at Gadsden. J. M. Elliott, Jr., Pres., 123 North 4th St.

LOUISVILLE, KY.—Percival Moore and S. P. Myer, of this city, are interested in the proposed construction of an electric railway from Louisville to Pewee Valley, via Shelbyville Pike.

FAIR HAVEN, O.—Dr. Hugh F. Lorimer, of Fair Haven, informs us that the proposed electric railway from Hamilton, O., to Richmond, Ind., a distance of 36 miles, would run along the Richmond & Hamilton Pike lying about one-half way between the Cincinnati, Hamilton & Dayton and the Pittsburg, Cincinnati, Chicago & St. Louis Rys. The route is through a thrifty portion of the state, touching at the towns of Darrtown, Morning Sun and Fair Haven, O., and Beechy Mire and Boston, Ind., which are from three to eight miles distant from either of the above-named steam railways. Nothing has yet been done toward construction, but it is believed that the people would help capitalists with both money and a free right of way.

SANDUSKY, O.—Fred. Shumer, Norwalk, O., has been awarded the contract for the stone work, and G. A. Breckenridge, Huron, O., the contract for grading on the extension of the Sandusky Interurban Ry. through Huron. The projected route is from Sandusky to Lorain, via Huron and Vermillion, 30 miles. Thomas Wood, Gen. Mgr.; C. A. Judson, Ch. Engr., both of Sandusky.

XENIA, O.—The Dayton & Eastern Traction Co., by Henry B. Pruden, has applied to the council for a franchise to build in this city.

EVANSVILLE, IND.—Henning & Henning, of Dayton, O., are said to represent capitalists who contemplate the construction of a suburban line from Evansville to Rockport, Tell City and Cannelton. C. J. Murphy, of the Business Men's Association, Evansville, may be addressed.

CORUNNA, MICH.—The council has granted a 30-year franchise to W. E. Avery, of Detroit, and F. J. Northway, of Durand, Mich., who are promoting the projected Long Lake, Durand & Corunna St. Ry.

GRAND RAPIDS, MICH.—The Grand Rapids, Belding & Saginaw Ry. Co. has been incorporated, with a capital stock of $350,000, to build a line from Freeport, Barry county, to Greenville, Montcalm county. The incorporators are: Thomas Hefferan, George Hefferan and Charles Percell, of Grand Rapids; Samuel W. McCall and George N. Ferald, of Boston, Mass.

CHARLESTON, ILL.—The Charleston & Mattoon Electric R. R. Co., of Charleston, has been incorporated, with a capital stock of $25,000, to operate an electric or dummy line in Coles county. The incorporators are: Forbes Holton, M. R. Williams and W. R. Patton.

ALAMEDA, CAL.—Ben. F. Lamborn, Cy. Clk., informs us that he desires a full line of catalogues regarding electric railways, car construction, rolling stock, transmission plants and electric lighting. G. A. Wiese, Cy. Electrician.

LONDON, ONT.—U. A. Buchner has submitted a proposition to the council providing for the construction of seven miles of new street railway.

BEPPU, JAPAN.—Reports state that the construction work is steadily progressing on the proposed Hoshu Electric Ry. from Beppu to Oita, in Kyushu. The contract for all the materials was let to the Saiga Electric Co., of Kyoto.

SHANGHAI, CHINA.—Bids are asked until March 15 for a concession for constructing about 23 miles of electric tramways in this city, as stated in our advertising columns. Plans may be obtained from Blackall & Baldwin, 39 Cortlandt St., New York, upon a deposit of $500. J. O. P. Bland, Secy., Shanghai.

ELECTRIC LIGHT AND POWER.

EVERETT, MASS.—Perry D. Blackden has applied for a franchise to build and operate a plant in this place. It is stated that the plant will cost about $60,000. At present light is furnished by the Malden Electric Light Co. Alderman White, Chn. Com.

WOONSOCKET, R. I.—F. S. Pond, Supt. Woonsocket Electric Machine & Power Co., writes us that it is proposed to put in a new 400-HP. engine to take the place of one recently destroyed. L. C. Lincoln, Gen. Mgr.

PORT CHESTER, N. Y.—The Port Chester Electric Light Co. has purchased 100 acres of shore front from the William Purdy estate, and will locate its new plant there, according to reports.

HERKIMER, N. Y.—The Westinghouse Electric & Mfg. Co., Pittsburg, Pa., has been awarded the contract for furnishing the machinery for the plant, at about $10,500.

NIAGARA FALLS, N. Y.—The Niagara Falls Power Co., on Nov. 22, made a contract with a new company formed by the men interested in the Oldbury Electro-Chemical Co., under the provisions of which 800 HP. will be furnished the new company by March 1, for the operation of a new electro-chemical plant to be built at once on the power company's lands adjacent to the Oldbury Electro-Chemical Co.'s works. The buildings will be erected at once.

PARKERS, N. Y.—The Utica Electric Mfg. Co., Utica, N. Y., has been awarded the contract for furnishing a plant of 150 lights for the L. B. Parker Lumber Mills.

WATERTOWN, N. Y.—Plans are being considered by the Black River Power Association, of Watertown, for its plant on the Upper Black River, according to reports.

BAYONNE, N. J.—Press reports state that the electric light plant at this place belonging to the Central R. R. of N. J., was burned Nov. 20, causing a loss of $5,000.

TRENTON, N. J.—Press reports state as follows: Thos. C. Barr, Orange, and Col. A. R. Kuser, Trenton, have purchased the franchises, etc., of the Trenton Electric Light & Power Co. for $415,000. Burr and Kuser represent themselves and J. F. Dreyden, Pres. Prudential Insurance Co., Newark, and other capitalists, and it is understood that their plans look to a consolidation of the electric light company with the Trenton St. Ry. Co. and the Delaware River Improvement Co. The latter company owns a water-power franchise at Morrisville, Pa., across the river from Trenton, and is interested in the proposed damming of the Delaware River for the purpose of turning the water power into electricity to supply the Trenton Electric Co. and the railway company with power. The building of an electric railway to Philadelphia is also said to be one of the projects in view, and, if accomplished, will be one more link in the New York & Philadelphia Traction Co.'s line. The property sold Nov. 15 for $415,000 represents a money investment of $170,000 made by the People's Electric Light Co. In 1892 Frank A. Magowan organized the Trenton Light & Power Co.

BLOSSBURG, PA.—The Blossburg Electric Co. has been awarded a 5-year contract for lighting this town with 106 32-c. p. incandescent lights.

NEW HOLLAND, PA.—Eli Martin has submitted a proposition to light this place by electricity.

TIMMONSVILLE, S. C.—The light committee wishes to correspond with manufacturers of electrical machinery, pumps, etc., for a plant and water-works. D. H. Traxler, Chn. Com.

KISSIMMEE, FLA.—The council has called an election to vote on the question of granting a 10-year franchise for a plant to J. M. Bailey.

DONALDSONVILLE, LA.—A. Culberson, Supt. Electric Light Plant, has recommended the purchase of a 37½-K-W. machine, with a 60-HP. high speed engine. Paul Leche, Mayor.

MONROE, LA.—This place voted Nov. 8 to issue $60,000 in bonds for a plant and water-works, $30,000 for a sewerage system, etc.

HENDERSON, TENN.—We are informed that the contracts have been let by the Henderson Electric Light Co. for the machinery for the proposed plant, to have a capacity of 4 2,000-c. p. arc and 500 16-c. p. incandescent lights.

CLEVELAND, O.—Henry C. Eyman, Supt. State Hospital, writes us that the following bids were received Nov. 16 for furnishing machinery, etc., for extending the plant at the State Hospital: Dynamos and motors, Fort Wayne Electric Corporation, Fort Wayne, Ind., $2,070; General Electric Co., Schenectady, N. Y., $1,920; Ridgway Dynamo Co., Ridgway, Pa., dynamo and engine, $3,129; B. M. Barr & Co., Cleveland, $1,920; Triumph Electric Co., Cincinnati, $1,900; Eddy Electric Mfg. Co., Windsor, Conn., $2,056; Westinghouse Electric & Mfg. Co., Pittsburg, $1,675 (accepted); Tresher Electric Co., Dayton, O., $2,030. Engines—General Electric Co., $1,220; Buckeye Engine Co., Salem, O., $1,075; Watertown Steam Engine Co., Watertown, N. Y., $1,050; Russell & Co., Massillon, O., $950 (accepted). Wiring—A. E. Moses, Cleveland, $345, also supplementary wiring, $195, awarded contract for entire wiring. The machinery bid on was as follows: Two 50-K-W.—110 W. direct connected dynamos to operate about 300 R. P. M.—Change in present switchboard and addition thereto—connecting wires from dynamo to switchboard, and one 10-HP. motor, one 7½-HP. motor, one 4-HP. motor, or (an alternative bid) one 50-K-W. dynamo, and the balance as above. Two automatic high-speed engines, each to develop 75 HP. at ¼ cut off and 80 lbs. pressure at the throttle and foundations for same, or (an alternative bid) one engine of the above size. Wiring—From the present main to the location of motor in the serving room, laundry, and machine shop, and change in the existing wiring and wiring for two arc lamps and two 50-c. p. incandescent lamps. Engrs., E. P. Roberts & Co., Osborn Bldg., Cleveland.

NEW RICHMOND, O.—Bids are asked until Dec. 7 for furnishing the materials and for constructing a plant and water-works, as stated in our advertising columns. J. F. Witmer, Engr., Buffalo, N. Y.; L. F. White, Secy.

PAYNE, O.—H. H. Snyder, Village Clk., writes us that the contract for building the plant for the Payne Electric Light & Power Co. has been let to Rosedale & Williams.

READING, O.—Bids are asked until Nov. 28 for furnishing and erecting one alternating-current generator for incandescent lighting; exciter, switchboard, and machinery and appliances connected therewith. Henry Varleman, Clk.; F. H. Varjohan, Chn. Com.

INDIANAPOLIS, IND.—The Chenoweth Electric Light & Power Co. has applied to the board of public works for permission to erect poles and string wires in the streets of the city.

BELLAIRE, MICH.—The council is reported to have purchased land on the Cedar River for an electric light and power plant.

NEWAYGO, MICH.—The Newaygo Transmission Co., recently incorporated, with a capital stock of $15,000, proposes to develop the water power at Newaygo, 30 miles north of Grand Rapids, and to transmit electric power to that city and others intermediate. The company has been granted a franchise to erect poles and string wires in Grand Rapids. A. C. Sekell, Elec. Engr., and Chas. F. Pike, of Grand Rapids, and John F. Barry, Civil Engr., 45 Cedar St., New York, and Allston Gerry, Contractor, 445 Produce Exchange Bldg., New York, are interested.

STURGIS, MICH.—This place has voted in favor of building a plant, according to reports.

LITCHFIELD, ILL.—The council has rejected the bids recently received for city lighting.

MILWAUKEE, WIS.—The Cassidy & Son Mfg. Co., 135 West 23d St., New York, has been awarded the contract for furnishing the lighting fixtures for the federal building in this city, at about $11,000.

STEVENS POINT, WIS.—Press reports state that J. Witter, Grand Rapids, and G. W. Paulus, of Chicago, are figuring on purchasing the plant of the Stevens Point Lighting Co., including gas and electric systems. If the deal is carried through a new water-power plant will be erected at the new dam to be built across the river in the spring by Witter, Paulus and others. The plant cost $60,000, and is now in the hands of Receiver V. P. Atwell.

EAST GRAND FORKS, MINN.—Bids are asked until Dec. 6 for constructing a combined plant and water-works to cost about $35,000. W. I. Gray & Co., Engrs., Sykes Bldg., Minneapolis; Henry Haren, Cy. Recdr.

COUNCIL BLUFFS, IA.—The J. C. Hubinger Co., Keokuk, Ia., has applied for a franchise for a plant in this city. It is stated that the contract between the city and the Council Bluffs Gas & Electric Light Co. expires Dec. 1, 1899. Under this contract the city pays the company $84 per annum for each arc light, on the Philadelphia schedule.

HUMBOLDT, IA.—A company has been organized to build a plant. T. G. White is interested.

ODESSA, MO.—A company is reported to have been organized to build a plant to cost $5,000.

NORTHPORT, WASH.—W. B. Lee and Montana capitalists are reported to have been granted a franchise. Work will be begun at once.

TILLAMOOK, ORE.—The city recorder writes us that the city is considering the question of purchasing the plant owned and operated by the Tillamook Lumber Co.

ALAMEDA, CAL.—Ben. F. Lamborn, Cy. Clk., writes us that the city wants to secure catalogues regarding electrical goods, lighting, transmission plants, etc. Bidders' blanks will be sent to those sending their names.

COLTON, CAL.—An election will be held Dec. 12 to vote on the question of issuing $20,000 in 6% bonds for a plant and water-works. G. E. Slaughter, Cy. Clk.

STOCKTON, CAL.—Bids are asked until Dec. 13 for the purchase of a 48-year franchise for building and operating a power plant in San Joaquin county. The Standard Electric Co. of California has applied for such a franchise. I. H. Robinson, Clk.

BARRIE, ONT.—The council is reported to have made an appropriation for a city plant.

LIVERPOOL, N. S.—The council has decided to build a plant and water-works, at a cost of about $31,000, according to reports. J. V. Dexter may be addressed.

HONOLULU, H. I.—It is stated that Fred. J. Cross, Elect. Engr., Buffalo, N. Y., has made a visit to the plant of the Hawaiian Fertilizer Works. Frank A. Cooke, Mgr., is figuring on the use of electricity at the place both for power and in disintegrating material brought for reduction and use. Mr. Cross will submit a report on cost, appliances, etc.

NUREMBERG, GERMANY.—Friedrich Tischendorfer, Ch. Engr. Electricaltats Aktiengeselschaft, formerly Schuckert & Co., manufacturers of electrical machinery, Nuremberg, is visiting the United States for the purpose of purchasing electrical material and machinery. His address while in New York is the Belvedere House.

NEW COMPANIES.—Washington Incandescent Light Co., Seattle, Wash.; $30,000.

Rossland Air Supply Co., Ltd., Rossland, B. C., and 183 St. James St., Montreal, Que.; $200,000; G. K. Milbouren, A. J. McMillan, Rossland; D. J. Fitzgerald, Trail, B. C.; F. Aug. Heiz, Butte, Mont.; to develop water power by the use of compressed air under what is known as the Taylor hydraulic system on Beaver Creek.

Sands Electric Co., Cleveland, O.; $10,000; L. Sands, Edward Velhagen, F. B. Skeels, C. R. Hunt, C. A. Bejcek.

Mitchell-Parsons Electric Co., Portland, Me.; electric car appliances; $150,000; Geo. A. Copeland, Revere, Mass.; Wm. E. Pearson, Winthrop, Mass.

Athens Electric Light & Power Co., Athens, N. Y.; $20,000; Jeremiah M. Shuman, Newburgh, N. Y.

Seymour Park Canal & Power Co., Omaha, Neb.; $100,000; the business of the association is to construct dams, waterways, develop water, electric or other power for private, public and municipal purposes, development of irrigating ditches and the holding and ownership of franchises for rights-of-way; Dr. Geo. L. Miller, Geo. N. Hicks, D. C. Patterson.

Standard Light, Heat & Power Co., Unadilla, N. Y.; $60,000; to furnish electricity for Unadilla, Gilbertsville, Otego, Sidney, Franklin, Bainbridge and Afton; Henry G. Canfield, Samuel E. North, J. Fred Sands, Daniel R. Buckley, Unadilla.

Rochester Electric Service Co, Rochester, N. Y.; $1,000; with $800 paid in; to manufacture electricity for light, heat and power in Rochester; John W. Cook, Jr., Frederick Fish, Miner S. Horton, George B Newman, Rochester.

Citizens' Light, Heat & Power Co., 317 Market St., Camden, N. J.; $100,000, with $1,000 paid in; A. Stewart Scull, Camden, N. J.; Wesley Bartine, Philadelphia, Pa.

Mutual Electric Co., Waco, Wash.; $10,000; W. W. Selby, S. W. Slayden, I. A. Goldstein, L. Migel.

El Porte Zuelo Light & Power Co., Chicago, Ill.; $500,000; Chester D. Crandall, William M. Carpenter, William R. Patterson.

Columbia Heat, Light & Power Co., Shenandoah, Pa.; $5,000.

American Incandescent Light Co., Meriden, Conn.; $50,000; Lyman T. Lawton, Thomas E. Webster, Bay City, Mich.; B. L. Lawton, A. S. Cody, Midland, Mich.; Robert L. Doran, Meriden.

Rocky Ford Electric Co., Puebla, Rocky Ford, Colo.; $15,000; J. B. Downey, F. A. Kittler, F. L. Cuddenback.

Fairhaven Electric Co., Fairhaven, Vt.; Delaware County Electric Light & Power Co., Chester, Pa.; $5,000,000; consolidation of companies in Delaware and Chester counties; Chas M. Wagner, Richard L. Austin, of Delaware county; John B. Hannum, Chester.

Harper's Ferry Electric Light & Power Co., Harper's Ferry, W. Va.; $15,000, with $2,500 paid in; John A. Livers, Gettysburg, Pa.; G. R. Bready, T. M. Conner, of Harper's Ferry.

Standard Water & Power Co., Golden, Colo.; $50,000; to absorb the Jefferson Water-Works Co. at Golden and to improve the works; J. M. Walker, C. C. Welch, F. W. Loveland, Henry Lee, Hugh Butler, F. G. Patterson, A. W. Tabor.

Anglo-American Electric & Supply Co., Toronto, Ont.; $5,000,000; G. P. Magann, Dr. R. A. Pyne, M. L. A.; G. S. Ransom, Toronto.

BRIDGES.

ASHTON, R. I.—Reports state that Sylvanus Mason, Pawtucket, R. I., has been awarded a contract, at $4,732, for constructing the center pier and abutments for a bridge over the Blackstone River. Chas. N. Robertson, Chn.

ALBANY, N. Y.—Bids are asked until Nov. 28 for removing and constructing an iron bridge over the Erie Canal, in the counties of Erie and Niagara. Geo. W. Aldridge, Supt. Pub. Wks.

BINGHAMTON, N. Y.—A petition, signed by about 400 taxpayers, was presented to the council Nov. 15 for the construction of a bridge over the Susquehanna River near the water-works.

BUFFALO, N. Y.—The council proposed to construct a bridge on Seneca St., over Buffalo Creek.

COHOES, N. Y.—The state railroad commission, Albany, will have plans prepared for a plate-girder bridge over the crossing on Ontario St.

MAMARONECK, N. Y.—The trustees have called an election for Nov. 28 to vote on the question of appropriating $3,000, the municipality's share of the expense of a new bridge over the railroad tracks at the Rye Neck portion of the town.

ORISKANY, N. Y.—Reports state that the Hilton Bridge Co., Albany, N. Y., has been awarded a contract to construct a bridge on the line of the Utica Suburban St. Ry. over Oriskany Creek.

UTICA, N. Y.—Bids are asked until Nov. 28 for constructing a lift-bridge over the Erie Canal at Washington St. Geo. W. Aldridge, Supt. Pub. Wks., Albany.

STARKEY, N. Y.—Reports state that a contract has been awarded to John C. Raphe, Dundee, N. Y., for constructing a bridge between this place and Barrington.

WEST SENECA, N. Y.—We are informed that the proposed overhead crossing of the parkway at this place will be contracted for in the spring. L. C. Geary, Supt. Park Bd., Buffalo, may be addressed.

BEAVER FALLS, PA.—A contract has been awarded to the Penn Bridge Co., Beaver Falls, for constructing a new bridge between New Brighton and this place.

NANTICOKE, PA.—M. L. Dreesbach, Ch. Clk. County Comrs., Wilkesbarre, informs us that the question of constructing a bridge on the Kingston flats, to cost about $6,000, will be considered next summer.

NANTICOKE, PA.—The county commissioners, Wilkesbarre, will construct a stone arch bridge. H. S. Smith, Engr., Wilkesbarre.

SCRANTON, PA.—The Grand Jury recommended Nov. 17 the proposed construction of about 10 bridges.

HOUSTON, TEX.—I. Austin Miller, Cy. Engr., informs us that the following bids were received Nov. 14 for constructing a bridge, as advertised in Engineering News Nov. 3:

Bids Received at Houston, Tex., Nov. 14, 1898, for Construction of a Bridge.

Bidder.	100 ft. high truss— 2 sets cylinder piers, 180-ft. steel approach.	1 set Cylinder pier, 140-ft. steel approach.	100 ft. through plate-girder— 2 sets cylinder piers, 180-ft. steel approach.	1 set cylinder pier, 140-ft. steel approach.	Brick abutment in lieu of one-cylinder pier.
New Jersey Steel & Iron Co., Trenton, N. J.	$11,994	$10,171	$12,400	$10,590	$10,200
Indiana Bridge Co., Muncie, Ind.	12,520	11,820	13,732	12,032	10,227
Southern Bridge & Construction Co., Houston, Tex.	12,562	10,932	13,902	12,272	.....
Missouri Valley Bridge & Iron Works, Leavenworth, Kan.	11,817	9,917	13,160	11,260	.....
Wrought Iron Bridge Co., Canton, O.	14,025	13,017	.....	.....	.....
King Bridge Co., Cleveland, O.	11,510	9,759	13,046	11,123	8,856
Gillette-Herzog Mfg. Co., Minneapolis, Minn.	11,780	11,000	12,505	11,775	.....
Morgan-Rhodes Construction Co., Waco, Tex.	10,745	9,064	11,990	9,670	.....
Geo. E. King Bridge Co., Des Moines, Ia.	13,897	12,624	14,998	13,846	.....
A. M. Blodgett, Kansas City, Mo.	11,475	9,800	12,846	10,900	.....
Groton Bridge & Mfg. Co., Groton, N. Y.	12,821	10,500	14,427	12,150	10,185
Koken Iron Works, St. Louis, Mo.	12,500	10,600	.....	.....	.....
Hipp & Key, Houston, Tex.	14,875	13,067	16,327	14,521	9,170
H. Shurter, Houston, Tex.	.....	.....	.....	.....	9,975
W. E. Humphreyville, Houston, Tex.	.....	.....	.....	.....	8,995
Borden & Antee, Houston, Tex.	.....	.....	.....	.....	8,500

SKINNER'S EDDY, PA.—We are informed that on Nov. 12 a charter was granted to the Tuscarora Bridge Co., Traders' Bank Bldg., Scranton, Pa., capital stock, $40,000; to build a four-span iron bridge over the Susquehanna River at Skinner's Eddy; total length, 870 ft. Pres., Chas. S. Knapp, Skinner's Eddy; Secy. and Treas., W. R. Chapin, Wyoming, Pa.; directors, C. S. Knapp and James Rooney, Skinner's Eddy; R. S. Patterson, and W. S. Wilcox, Scranton, Pa.; E. G. La France, A. L. Lindsay and W. R. Chapin, of Wyoming, Pa. A. B. Dunning, Engr., 610 Mears Bldg., Scranton, Pa.

WILKES-BARRE, PA.—The Grand Jury in a report Nov. 12 appropriated $23,000 for the construction of 10 iron and 36 stone arch bridges.

ROME, GA.—Bids are asked until Dec. 3 for furnishing material and constructing a wooden or iron bridge across Bush Arbor Creek. E. P. Treadway, County Clk.

BROOKHAVEN, MISS.—Bids are asked by the county supervisors until Jan. 3 for constructing a steel bridge over the Homochitto River, according to reports. E. P. Ashbury & Son, Engrs., Houston, Tex.

CANTON, O.—The county commissioners received the lowest bids Nov. 15 for a bridge, 100 ft. long, over Nimshillen Creek, at Shack's mills, from the Wrought Iron Bridge Co., Canton, at $3,260, and for a bridge, 131 × 24 ft., at Canal Fulton, from the Penn Bridge Co., Beaver Falls, Pa., at $8,050.

COSHOCTON, O.—The Canton Bridge Co., Canton, O., has been awarded a contract, at $7,249, for the superstructure of the Denman bridge. Newton Speckman, County Audr.

MARIETTA, O.—The bridge committee has recommended the construction of a new bridge at Putnam St.

JACKSON, MICH.—Plans have been approved for a steel foot bridge to be constructed by the Michigan Central Ry. Co., between Van Dorn and Liberty Sts.; two spans 133 ft. and 88 ft., to cost about $2,700. W. S. Kinnear, Asst. Ch. Engr., Detroit.

CHICAGO, ILL.—Bids are asked until Dec. 28 for constructing the substructure and superstructure of an eight-track railway bridge, over the main drainage channel, as described in our advertising columns. James Reddick, Clk. Bd. Trustees, Sanitary Dist.

MINNEAPOLIS, MINN.—On Nov. 25 the council will decide when to ask bids for the structural iron work for the widening of the bridge from Nicollet Island to the East Side.

OLIVET, S. DAK.—J. J. Mueller, County Audr., informs us that the following bids were received Nov. 11 for constructing a 185-ft. span, with an 85-ft. approach and for 40 and 30-ft. span bridges, respectively:

Minneapolis (Minn.) Bridge and Iron Co.	$6,148
Canton (O.) Bridge Co.	6,850
Geo. C. Wise & Co., Council Bluffs, Ia.	6,678
Gillette-Herzog Mfg. Co., Minneapolis, Minn.	5,797
Starr Iron Works, Minneapolis, Minn.	6,582
L. H. Johnson, Minneapolis, Minn.	5,736
B. F. Parks & Co., Cedar Rapids, Ia.	6,426
Clinton Bridge & Iron Works, Clinton, Ia.	5,978
S. B. Howe, Sioux Falls, S. Dak.	5,890
J. B. Marsh & Co., Des Moines, Ia.	6,625
W. S. Hewett	6,920
S. M. Hewett & Co.	6,872
Joliett (Ill.) Bridge & Iron Co.	6,200
J. R. Sheeley & Co., Lincoln, Neb.	6,148
Kansas City (Mo.) Bridge Co.	6,112
Geo. E. King Bridge Co., Des Moines, Ia.	5,675

LEAVENWORTH, KAN.—Bids are asked until Dec. 5 for the construction of seven bridges. J. W. Niehaus, County Clk.

KANSAS CITY, MO.—The Northeast Electric Ry. Co. will construct a new steel bridge at Agnes Ave., to cost about $30,000, according to reports. R. R. Conklin, Vice-Pres.

OAKLAND, CAL.—The county supervisors received the two lowest bids Nov. 7 for constructing a new bridge at Webster St., from the Schmidt Construction Co., at $86,700, and Cotton Bros. & Co., at $92,500.

LEWISTON, IDAHO.—Reports state that the Pittsburg Bridge Co., Pittsburg, Pa., has been awarded a contract at $110,000 for constructing a bridge over the Snake River.

KAMLOOPS, B. C.—It is proposed to construct a bridge over the Thompson River, at the ferry.

CHIHUAHUA, MEX.—It is reported that the Chihuahua & Pacific R. R. Co., No. 80 Broadway, New York, N. Y., has awarded the Pencoyd Iron Works, Philadelphia, Pa., a contract for 36 single spans, one double span and four viaducts, in all about 1,200 tons of steel.

BUILDINGS.

AUGUSTA, ME.—Taber, Carey & Reid, of Augusta, and Alexander Duncan & Co., Boston, Mass., were awarded the contract Nov. 12 for heating the Augusta House, H. E. Capen, proprietor. Two 3,000 ft. sectional Magee steam boilers will be used, with 130 radiators.

BANGOR, ME.—It is reported that the Maine Central R. R. will soon erect a new 36-stall round house at High Head. T. L. Dunn, Ch. Engr., Portland, Me.

BOSTON, MASS.—Bids are asked until Nov. 25 for erecting a wooden school building at the Parental School in West Roxbury; bond, $4,000. H. A. Lamb, Chm., 32 Tremont St.

MIDDLETOWN, CONN.—Plans have been prepared, according to reports, for an addition and alterations to the Hospital for Insane, to cost about $75,000. Dr. C. W. Page, Supt.

BATH, N. Y.—Bids are asked until Nov. 26 for steam heating and ventilating, plumbing, electric light wiring and fixtures, at the New York State Soldiers' and Sailors' Home. O. H. Smith, Secy., Bath.

BROOKLYN, N. Y.—Reports state that George Crosby, 1140 40th St., will erect sixty-one 2-story frame dwellings, 20 × 49 ft., on 40th St., between 12th and 13th Aves.; estimated cost, $172,000. Arch., H. L. Spicer, 326 56th St.

BUFFALO, N. Y.—A new 7-story steel building will soon be erected at Main and Mohawk Sts., to cost about $70,000. Mayor & Weill, of Buffalo, are said to be interested.

EAST HAMPTON (L. I.), N. Y.—Plans are about prepared for erecting a new 3-story hotel at this place, to contain about 50 rooms, for the Maidstone Improvement Co.; estimated cost, $25,000. Rogers & Blyndenburgh, contractors, Babylon (L. I.), N. Y.; J. H. Green, Jr., Arch., Sayville (L. I.), N. Y.

LESTERSHIRE, N. Y.—A special election will be held in this village, Nov. 29, to consider the proposition of erecting a new fire station and municipal building, at a total cost of $24,000, and also of improving the waterworks system. M. S. Squires, Village Pres.

NEW BRIGHTON (S. I.), N. Y.—Bids are asked by the department of public buildings, at 346 Broadway, New York, until Dec. 6, for erecting an automatic low-pressure steam-heating apparatus in the village hall at New Brighton, Borough of Richmond.

NEW YORK, N. Y.—Sullivan & Clark, Binghamton, N. Y., have been awarded the contract for erecting a number of buildings on Ward's Island, for the Manhattan State Hospital, to cost about $110,000.——Plans have been filed by A. C. Hall, 265 West 73d St., for three 5-story brick flat buildings on 13th St., near 7th Ave., to cost $69,000. Archs., Neville & Bagge, 217 West 125th St.; by N. L. McCready, 15 Broad St., for a 12-story brick flat building at 145 and 147 5th Ave., to cost $275,000. Arch., H. Edwards Ficken, 10 West 22d St.; by the Metropolitan Investment Co., 160 Broadway, for a 7-story brick flat and store building at 103d St. and the Boulevard, to cost $150,000. Arch., David W. King, 111 5th Ave.; by Elizabeth Moore, Marmion Ave. and Fairmount Place, for three 7-story brick flat and store buildings on 116th St., near Morningside Ave., to cost $135,000. Arch., Lorenz F. J. Weiher, Jr., 125th St. and Park Ave.; by J. H. Styles, Jr., for four 5-story brick flat buildings on 163d St., near Amsterdam Ave., to cost $80,000. Arch., J. E. Styles; by Jos. & J. A. Pinchbeck, for a 7-story brick flat building at 94th St. and Central Park West, to cost $175,000. Archs., Neville & Bagge, 217 West 125th St.; by John P. Duncan, 9 East 64th St., for a 12-story brick store and loft building at Broadway and Waverley Place, to cost $175,000. Arch., C. P. Sefert, 322 West 31st St.

SYRACUSE, N. Y.—The penitentiary committee of the board of supervisors of Onondaga county has finally decided to recommend that the plans of M. D. Makepeace, of Syracuse, be accepted, having the cell construction work done by the Pauly Jail Building & Construction Co., St. Louis, Mo.; estimated cost, $156,000. Ray B. Smith, Chn. of Bldg. Com.

ATLANTIC CITY, N. J.—It is reported that John L. Young has decided to erect a 4-story brick, steel and concrete building at South Carolina Ave. and the beach. Arch., Harold Adams.

BOONTON, N. J.—David Henry, Paterson, N. J., has received the contract for remodeling the Lathrop Homestead, for aged firemen, at Boonton, for $19,776.

CAMDEN, N. J.—Charles McCaul, of Philadelphia, was awarded the contract, Nov. 15, for the construction of the new U. S. building at Camden, using Vermont marble, at $153,669. The work is to be completed within one year.

McKEESPORT, PA.—The school controllers of this city have asked ten architects to submit plans and specifications for a new 4-story high school building, to be erected on Shaw Ave.; and have also asked bids for $100,000 of bonds for the purchase of the ground and erection of the building, the latter to cost about $55,000.

PHILADELPHIA, PA.—Plans have been filed for a 7-story stone and terra cotta apartment building on 37th St., near Chestnut St., for C. H. S. Littleton, to cost about $60,000. Arch., Harry Peake, Jr., Harrison Bldg.——William R. Dougherty, 1604 Sansom St., has been awarded the contract, and has received a building permit, for the erection of a 4-story brick and iron store building at 1533 Chestnut St., for Herman E. Bonschier; to cost about $25,000. Addison Hutton, Arch.

BALTIMORE, MD.—Reports state that the directors of the Maryland Penitentiary have awarded the following contracts for work in the new penitentiary building. John F. Weyler, Warden: For steam and power plant, including four engines, four boilers, pump, feed water heater, etc., to Wallace Stebbins, $30,002; for electric equipment, including four dynamos, cables, etc., General Electric Co., $18,659; for wiring of interior, court yard, cells, etc., McKay Engineering Co., $14,789; for one Sprague passenger elevator, Morton, Reed & Co., $3,850; for heating of refectory building, Wallace Stebbins, $850; for finishing refectory, including kitchen, bake shop and dry room, J. Henry Miller, $28,824; plumbing, G. W. Walters & Co., $1,458; for interior finish of executive building and warden's residence, J. H. Miller, $9,617; for marble flooring, sills, etc., Evans Marble Co., $6,325; for extra iron work, Krug & Son, $682.

WASHINGTON, D. C.—It is reported that a 4-story building, 100 × 200 ft., will be built in this city before spring, for the Washington Milk Trust, to cost $150,000. Arch., N. T. Haller, 1216 F St., N. W.

SAVANNAH, GA.—The Sprague Elevator Co., 20 Broad St., New York, has been awarded the contract for installing one electric passenger elevator in the U. S. building in this city, at $3,735; time, 90 days.——W. F. May & Co., of Chattanooga, Tenn., has been awarded the contract for erecting the government hospital in Savannah, at $77,934; time, 60 days. For other bids see our last issue.

LA FAYETTE, ALA.—Plans and specifications are asked by the commissioners of Chambers county, until Dec. 1, for a new court house, to cost between $25,000 and $30,000. A. J. Driver, Jr., County Judge.

LEXINGTON, KY.—Fayette county has voted to issue $100,000 of 4% court house bonds.

LOUISVILLE, KY.—Reports state that a 6-story fireproof hotel building will be erected at 5th and Jefferson Sts., at a cost of about $300,000, for Louis and Otto Seelbach, 6th and Main Sts.——A fire in this city, Nov. 19, destroyed the building at 611 West Main St., occupied by the Renz-Bowles Co., wholesale druggists, causing a reported loss of about $80,000; insurance $72,000.

CINCINNATI, O.—We are informed that the University of Cincinnati has awarded the contract for erecting an additional building, to be known as Cunningham Hall, to Jas. Griffith & Sons, at $36,525.

LIMA, O.—The board of education has decided not to rebuild the high school building wrecked by the recent cyclone, but to erect a new 16-room building on modern designs, the work to commence at once, to cost about $30,000.

MARIETTA, O.—The people of this county have voted to issue $125,000 in bonds for the erection of a new court house and jail. L. E. McVay, Clk. of Court, informs us that no plans have yet been prepared, nor date fixed as to the receiving of the same. C. M. Grub, John Randolph and William Hadley, County Comrs.

OBERLIN, O.—James Devault, Columbus, O., has been awarded the contract for erecting the Lorain County Children's Home, at Oberlin, at $25,095, using pressed brick.

PORT HURON, MICH.—James O'Sullivan has been awarded the contract for the erection of the new Maccabee temple, to cost about $60,000.

CHICAGO, ILL.—A 3-story brick and stone office building is to be erected for the Goss Printing Press Co., at Paulina St. and 15th Place, to cost about $35,000.——The board of education has been granted a permit for the construction of a 2-story school building, 100 × 110 ft., to be erected at 4314 to 4320 North Ashland Ave., to cost $45,000.

ROCK ISLAND, ILL.—Reports state that the board of education has definitely decided to replace the old Hawthorne school building, on 8th St., with a modern 12-room building, to be erected next year. The cost will be $30,000, and F. Borgolte has been retained to prepare plans.

PEORIA, ILL.—Plans are being prepared for the new Lincoln school building, to cost $40,000. Richardson & Hotchkiss, Archs.

MINNEAPOLIS, MINN.—This city has voted to issue $200,000 in school bonds.

AUSTIN, MINN.—Bids are asked until Dec. 15 for the erection of a brick and stone court house for Hancock county; deposit, $800. H. B. Reed, County Audr.; F. W. Kinney, Arch., Austin.

DES MOINES, IA.—It is reported that the Chicago, Rock Island & Pacific R. R. Co. will erect a $200,000 station in this city.——The people of Polk county have voted to issue $400,000 in court house bonds.

MUSCATINE, IA.—The contract for erecting the new station of the Muscatine, North & South Ry. has been awarded to Magoon & Kincaid, of Muscatine, at $25,000.

PERRY, IA.—A fire here Nov. 20 destroyed a number of buildings in the business section of the city, causing a loss of about $400,000.

SHENANDOAH, IA.—The Chicago, Burlington & Quincy Ry. Co. is said to be planning the erection of a new depot, 24 × 116 ft., at this place.

WEBSTER CITY, IA.—Bids are asked until Dec. 15 for the erection of a church building for the Lutheran Church in this city. J. O. Lenning, Chn. Bldg. Com.; Omeyer & Thori, Archs., St. Paul, Minn.

NADEAU, KAN.—Bids are asked by the Office of Indian Affairs, Washington, D. C., until Dec. 13, for the materials and labor required in the erection of one frame dormitory and school building on the Kickapoo Reservation. Geo. W. James, U. S. Indian Agent, Nadeau, Kan.

YATES CENTER, KAN.—The citizens of Woodson county have voted to issue $30,000 in bonds for the erection of a new court house and jail building.

COLORADO SPRINGS, COLO.—It is reported that the Antlers Hotel, recently destroyed by fire, will be rebuilt, at a cost of about $250,000. E. Barnett, lessee, and Gen. W. J. Palmer may be addressed.

ALBUQUERQUE, N. MEX.—The people of this city are considering the erection of a $30,000 opera house.

SAN FRANCISCO, CAL.—W. H. Wilcox has completed plans for a military hospital to be erected at the Presidio by the government, to cost $170,000.——The following bids were received Nov. 12 by the bureau of yards and docks, Washington, D.C., for the construction of 12 buildings at the Mare Island navy yard; (a) for work complete, (b) allowing for certain omissions: Dennis Jordan, San Francisco, (a) $169,000, (b) $155,000; Cameron & McDonald, Oakland, Cal., (a), $166,686, (b) $148,786; California Bridge & Construction Co., Oakland, (a) $152,800, (b) $134,370; Philip Sheridan, West Berkeley, Cal., (a) $147,232, (b) $130,708.

MONTREAL, QUE.—Plans are said to be completed for the erection of the new Grand Trunk office building on McGill St., to cost about $400,000.

PUEBLA, MEXICO.—The state legislature has appropriated $1,000,000 for the erection of a new government palace, and $500,000 for a general hospital. Plans have not yet been prepared for the former building.

WATER-WORKS.

BATH, ME.—It is reported that the New England Insurance Exchange, Boston, has recommended that the pumping machinery and that the water supply in general be improved.

ESSEX JUNCTION, VT.—E. E. Russell, Clk., writes us that nothing definite in regard to works has yet been decided upon. A bill is before the legislature to grant this village authority to build works. Population, 1,000.

ARLINGTON, MASS.—The citizens are considering the question of applying for admission to the Metropolitan water district.

BOSTON, MASS.—The council has voted to secure a loan of $200,000 for extending the water mains. John R. Murphy, Water Comr.

HOLYOKE, MASS.—Jas. L. Tighe, Engr. Water Dept., has been directed to complete plans and specifications for a filtration plant at the Whiting St. reservoir; estimated cost, $20,000.

BAINBRIDGE, N. Y.—There is a legal contest on between the Bainbridge Water-Works Co. and the city as to their respective rights. An injunction has been served on the city restraining it from building the proposed municipal works. The case will be argued at Oneonta, Dec. 3. The company claims the exclusive riparian rights to the only stream available, while the city thinks otherwise, and has commenced pipe laying. Thos. L. Randall, Afton, N. Y., has been making surveys for the company.

BINGHAMTON, N. Y.—It is proposed to lower each of the wells about 4 ft. below the present depth, at a cost of about $25,000. Darwin Felter, Supt.

IRVINGTON, N. Y.—Press reports state that the Mack Paving Co., 35 Nassau St., New York, submitted the lowest bid, Nov. 10, at $45,410, for constructing a reservoir for the water-works. The next lowest bidders were: Durkel & Jewell, Irvington, N. Y., at $49,647, and Jas. Duell, Tarrytown, N. Y., at $50,676. T. W. Crisfield Clk.

LESTERSHIRE, N. Y.—An election will be held Nov. 29 to vote on the question of issuing $14,000 in bonds for a new pumping station. M. S. Squires, Pres. Bd. Trustees.

WATERVLIET, N. Y.—Elnathan Sweet, 13 Tenbroek St., Albany, and Chas. G. Whitbeck have submitted estimates, plans and recommendations for new works, to cost $234,493. The proposed supply will come from the Deepkill. An election will be held Dec. 12. The estimated cost in detail follows: Reservoir—Excavation, masonry, gatehouse, cr.b, land, $29,025. Conduit—45,400 ft. of 16-in. pipe and crossing Hudson and Mohawk rivers, $85,700. Distribution system—15,000 ft. 12-in. pipe, 25,000 ft. 8-in., 45,000 ft. 6-in., 5,000 ft. 4-in., 10,000 ft. smaller pipe, six canal crossings, rock in trenches, 80 tons of special castings, valves, hydrants, etc., $98,450; add 10% for emergencies, etc., $21,318.

WHITE PLAINS, N. Y.—We are informed that the village is making surveys for several storage reservoirs. No construction will be done before the spring. Improvements are being made in the pumping station by day labor, to render it more efficient. John M. Farley, Consult. Engr., White Plains; Fred Seymore, Supt.

ASBURY PARK, N. J.—The council by a tie vote has decided not to adopt water meters for the city. It is stated that the question may again be brought up at the next election. Councilmen Harvey and Kirkbride may be addressed.

ORANGE, N. J.—J. N. Travis, Supt. Water-Works, writes us that A. J. L. Loretz, 126 Liberty St., New York, will probably complete plans for a supply from Campbell's Pond, Milburn township, in a few days. Local papers state that a new pumping station and reservoir will be built at a cost of $50,000, or about $100,000 less than by former plans.

BRADFORD, PA.—We are informed that W. Hanley, Bradford, Pa., has been awarded the contract for building a storage reservoir.

DUBOIS, PA.—Plans are being considered for increasing the water supply. Councilmen Reed, Chn. Com., and Casey may be addressed.

ROCK HILL, S. C.—Guild & Co., Chattanooga, Tenn., were awarded the contract Nov. 15 for building the works for the Rock Hill Water, Light & Power Co., as advertised in Engineering News. The contracts for the materials were let to the following: Cast iron pipe, the American Pipe & Foundry Co., Chattanooga, Tenn.; hydrants and gates, R. D. Wood & Co., Philadelphia, Pa.; stand-pipe, the Lombard Iron Works, Augusta, Ga.; pumps, Henry R. Worthington, Liberty St., New York; air lift, Bacon Air Lift Co., 100 Broadway, New York. J. L. Ludlow, Engr., Winston, N. C.

SPARTANBURG, S. C.—John B. Cleveland and John H. Montgomery are interested in the proposed new gravity works.

TIMMONSVILLE, S. C.—The committee wishes to correspond with manufacturers of machinery for electric light plants and water-works. D. H. Traxter, Chn. Com.

WALHALLA, S. C.—Capt. R. C. Strother, West Union, S. C., writes us that he has been granted a franchise for works for this place, also the privilege of securing water from the head of Cane Creek, four miles from here. The water will be furnished by gravity; only pipe and fixtures are wanted.

PRATT CITY, ALA.—W. G. Powell, Mayor, has called a public meeting to consider the question of building works.

MONROE, LA.—This place voted Nov. 8 to issue $155,000 in bonds for improvements to be used as follows: Water-works and electric light plant, $60,000; sewerage system, $13,000; streets, etc., $50,000.

ALLIANCE, O.—This city voted Nov. 8 to purchase the works of the Alliance Water-Works Co. Councilman Conger, Chn. Com.

CINCINNATI, O.—Chief Engineer G. Bouscaren has submitted to the commissioners plans and specifications for the construction of two settling reservoirs of the new works at California, and also for the laying of two lines of mains connecting the reservoirs with the pumping station. The reservoirs will have a combined capacity of about 345,000,000 gallons, affording periods of 72, 60 and 48 hours' sedimentation for daily outputs of 57,500,000, 69,000,000 and 86,250,000 gallons, respectively.

CUYAHOGA FALLS, O.—This place again voted on Nov. 8 against issuing $60,000 in bonds for works.

NEWARK, O.—The Newark Ohio Water Co. has been incorporated to operate the works of the Newark Water-Works Co., which for the last few years has been in the hands of a receiver. Capital stock, $73,500, with $50 paid in. The plant was built in 1885 by Moffett, Hodgkins & Clark, Syracuse, N. Y. Incorporators, H. C. Hodgkins, Syracuse, N. Y., and W. W. Rice, W. H. Hadcock and N. P. Wardwell, Watertown, N. Y.

NEW RICHMOND, O.—Bids are asked until Dec. 7 for furnishing the materials and for constructing works and a light plant, as stated in our advertising columns. J. F. Witmer, Engr., Buffalo, N. Y.; H. Buckley, Pres. Electric and Water-Works Trustees.

WELLSVILLE, O.—D. A. Davidson, Supt. Water-Works, writes us that the proposed extension to the works, for which $12,000 in bonds were voted Nov. 8, will consist of 6, 8, 10 and 12-in. pipe, to take the place of smaller mains.

MOUNT CLEMENS, MICH.—Henry R. Worthington, 86 Liberty St., New York, has been awarded the contract for furnishing a new pumping engine, at $6,800, according to reports.

MARKESAN, WIS.—The question of building works is being considered, according to reports.

WEST SUPERIOR, WIS.—Press reports state that the Superior Water, Light & Power Co. has decided to build a water filtration plant, etc., at a cost of about $100,000.

PERSIA, IA.—Dr. F. M. Hill writes us that the town will probably spend about $4,500 for a water tank and cast iron water mains. There will be wanted a gasoline engine of about 8 HP., 5,280 ft. of 4 and 6-in pipe, 10 or 12 hydrants, 8 valves, etc.

EAST GRAND FORKS, MINN.—Bids are asked until Dec. 6 for furnishing the materials and for building combined works and electric plant, to cost about $35,000. Population, 3,000. W. I. Gray & Co., Sykes Bldg., Minneapolis, and the Twin City Iron Works prepared the plans. Henry Haren, Cy. Recdr.

LINCOLN, NEB.—Ferdinand Bonstedt, Cy. Engr., has submitted a report and estimates for improving the water supply and replacing mains. Estimated cost, $48,000.

WAMEGO, KAN.—Bids are asked until Nov. 30 for furnishing the materials and for building works, for which $25,000 in bonds were voted Nov. 15. F. S. Haacke, Cy. Clk., writes us that the water supply will be secured from wells. H. V. Hinckley, Engr., P. O. Box 242, Topeka, Kan.

ALEXANDRIA, S. DAK.—The question of building works is being considered, according to reports.

TOPEKA, KAN.—This city voted Nov. 12 to issue $240,000 in bonds for municipal works. It is stated that the validity of the bond issue will be attacked in the courts.

GREAT FALLS, MONT.—Andrew Rinker, Secy. and Treas. Great Falls Water Power & Townsite Co., and Pres. Bd. Water Comrs., writes us that on Nov. 3 the city came into possession of the works by purchase from the Great Falls Water Co., the consideration being $375,000. The plant has a pumping capacity of 8,500,000 gallons a day, 26 miles of main and 265 hydrants. The city sold 5% bonds to the amount of the purchase price, at a premium of $10,105. The management of the works has been placed in the hands of a board of water commissioners, consisting of J. N. Bridges, Herbert Mattison and Mr. Rinker.

GUTHRIE, OKLA.—H. C. Barney, Water Comr., writes us that something will probably be done this winter in regard to a better water supply. A committee is now considering the question. Population, 10,000.

SHAWNEE, OKLA.—Chas. E. Brown, Coffeyville, Kan., is reported to have been awarded the contract for building the proposed works at $32,095. Benj. Dierker, Clk.

BOULDER, COLO.—Press reports state as follows: The plan to purchase the reservoir and rights up Boulder Canon, owned by Mr. Stephens and his associates, has been abandoned for the present, owing to the cost. Although the city recognizes the necessity of a greater water supply, it has been decided to conform to the present arrangements at least until the next municipal election, when, if necessary, bonds may be voted for the purpose.

DENVER, COLO.—J. B. Hunter, Cy. Engr., has submitted a report to Mayor McMurray that works, larger and better than that of the Denver Union Water Co., can be built for $3,700,000. The mayor has recommended the issuance of $6,000,000 in bonds for that purpose. The Denver Union Water Co. some months ago offered to sell its works to the city for $9,000,000.

GOLDEN, COLO.—The Standard Water & Power Co. has been incorporated with a capital stock of $50,000; it will take its water supply from Chicago and Echo lakes; directors, J. M. Walker, C. C. Welsh, F. W. Loveland, H. A. W. Tabor, Henry Lee, Hugh Butler and F. G. Pattison.

NEW WHATCOM, WASH.—Horne & Stone are reported to have submitted the lowest bid, Nov. 8, for building an extension to the works at $14,600.

INDEPENDENCE, ORE.—The question of building municipal works is again being considered, according to reports.

COLTON, CAL.—Another election will be held Dec. 12 to vote on the question of issuing $20,000 in 6% bonds for municipal works. G. E. Slaughter, Cy. Clk.

LAKEPORT, CAL.—An election will be held Dec. 20 to vote on the question of issuing $15,000 in bonds for works.

SACRAMENTO, CAL.—D. A. Lindsley, Pres. Chamber of Commerce, writes us that the chamber is testing the supply from wells with a view to getting the city to change from river water, if the supply from wells is demonstrated to be superior. J. W. Watt, Cy. Tapper, writes that the trustees propose to issue bonds for extending the works and sewerage system, erecting school buildings, etc. No definite plans have been made, but about $130,000 will be expended upon machinery and pipes for the water-works.

SAN FRANCISCO, CAL.—The Union Water Co. has been incorporated, with a capital stock of $390,000, by C. A. Hooper, Geo. W. Hooper, D. C. Henney, E. F. Burrell and W. G. Tibbetts.

JEROME, ARIZ.—This place is reported as considering the question of building works. John Burkes may be addressed.

PHOENIX, ARIZ.—The Arizona Water Co. was incorporated last week in Maine; capital stock, $1,500,000; incorporators, Arthur B. Leach, 2 Wall St., and Osborn W. Bright, 46 Wall St., both of New York.

BRIGHAM, UTAH.—The council is reported as considering a proposition for increasing the water supply from Bay Elder Creek.

SILVER CITY, UTAH.—The Silver City Water Co. has been incorporated, with a capital stock of $20,000. Levi E. Riter, Pres.; C. E. Loose, Vice-Pres.; C. V. Wheeler, Treas.; John W. Hatfield, Secy.

BARRIE, ONT.—This city voted Nov. 7 to issue $100,000 in bonds for the purchase of the works of the Barrie Water-Works Co., and to make certain extensions.

BRANTFORD, ONT.—It is stated that this city has approporiated $20,000 for extending the water mains.

TORONTO, ONT.—Bids are asked until Dec. 5 for furnishing for the coming year such valves, castings, pipe, lead, etc., as may be required. John Shaw, Mayor.

SANTIAGO, CUBA.—Press reports state that Gen. Leonard Wood has assigned Lieut. E. C. Brooks, of the Sixth Cavalry, and the Adjutant-General here, to make plans for new water-works. The construction will be commenced as soon as the plans are completed. The water supply of the city has always been bad, but under the present conditions the supply will be entirely inadequate for the dry season, which is just beginning, and therefore the work of procuring plenty of water will be pushed as rapidly as possible.

IRRIGATION.

SAN DIEGO, CAL.—Reports state that W. T. Gouder has filed on 10,000 cu. ft. of water of the Colorado River for irrigation and developing power in this county and lower California. A canal, 80 miles long and 200 ft. wide, will be constructed to convey water to the New River country.

PHOENIX, ARIZONA.—It is reported that L. V. Navarro, Consul of Mexico, Phoenix, states that the Hudson Reservoir & Canal Co., is arranging to construct a reservoir on Salt River about 90 miles northeast of Phoenix. Plans have been prepared for a dam about 200 ft. high and 600 ft. long at the head of the canyon. It is estimated that the reservoir will cover about 18 sq. miles at a depth of 100 to 200 ft.; estimated cost, about $2,500,000.

PROVO CITY, UTAH.—Reports state that the Telluria Power Co. is interested in an irrigation project to irrigate about 20,000 acres of land. Surveys are being made for a 30-mile ditch from American Fork Canyon to the lands west of Jordan River and north of Utah Lake.

NEW COMPANIES.—Omer Ditch Co., Fowler, Colo.; $10,000; to construct a ditch from Apishapa Creek for irrigation; C. A. Watson, C. B. Miller and G. L. Taylor.

Holbrook Land & Water Co., Provo City, Utah; $300,000; to construct canals, reservoirs, dams, etc., for irrigation, power, etc.; Lafayette Holbrook, Pres.; B. S. Hinckley, Secy. and Treas.; James A. Melville, Vice-Pres.; Joseph E. Ray, Emily A. Holbrook.

Arizona Water Co., Augusta, Me.; $1,500,000, with $500 paid in; to construct, operate and sell irrigating canals, water and water rights; Pres., Arthur B. Leach, and Treas., Osborn W. Bright, of New York.

SEWERAGE.

MIDDLEBORO, MASS.—Chas. C. Grinnell, counsellor-at-law, 30 Court St., Boston, writes us that it is expected that the state board of health will, on Dec. 1, decide the case of the alleged pollution of the Nemasket River by emptying into it the sewage of the town. Should the case be decided against the town it will have to make a number of changes in its system.

STOCKBRIDGE, MASS.—The town has appropriated $15,000, in addition to $7,500, for a system. The committee consists of Dr. Burnette, Marshall Heath, S. A. Cook and D. D. Fenn, according to reports.

BALLSTAN SPA, N. Y.—Bids are asked by the village trustees until 8 p. m., Nov. 25, for constructing the East North St. sewer.

BUFFALO, N. Y.—Bids are asked until Dec. 1 for constructing an 8-ft. 10 × 7½-ft., 7½-ft. and 5¼-ft. brick sewer in Van Rensselaer St. R. G. Parsons, Secy. Bd. Pub. Wks.

BUFFALO, N. Y.—Bids are asked until Nov. 29 for building a 12-in. pipe sewer in Moeller St. R. G. Parsons, Secy. Bd. Pub. Wks.

CATSKILL, N. Y.—Local papers state that arrangements are being made to construct the proposed Pasture Lot sewer, at a cost of about $10,000. Village Trustee Knoll may be addressed.

DEPEW, N. Y.—Press reports state that work on a second section of the proposed system, to cost about $300,000 will soon be begun. About two-thirds of the main sewer, to cost about $80,000, has been built.

JAMAICA (L. I.), N. Y.—The following were the only bids received by the sewer commissioner, 256 Broadway, Manhattan, for building certain sewers in Jamaica, now the 3d Ward of Queens: Jos. Caccavajo & Co., $6,748; Patterson Construction Co., $11,743.

WHITE PLAINS, N. Y.—Wm. B. Sutherland, Village Clk., writes us that the contract for building the addition to the sewerage disposal plant, has been awarded to Alex. S. Traub, New York, at $1,925. The contract for the boilers has been let to M. T. Davidson, 53 Keap St., Brooklyn, N. Y.

PITTSBURG, PA.—Bids are asked until 2 p. m., Nov. 25, for constructing pipe sewers in a number of streets. Edward M. Bigelow, Dir. Dept. Pub. Wks.

SOMERSET, PA.—This place voted Nov. 8 to issue $20,000 in bonds for a system.

YORK, PA.—The York Sewerage Co. has asked for a franchise to build and operate a system. D. H. Lafean and C. H. Dempwolf, of the company, and Councilman Fisher, Chn, Highway Com., may be addressed.

EAST LIVERPOOL, O.—F. H. Croxall, Secy., writes us that the city is about to ask for bids for furnishing eight miles of 12 to 4-in. sewer pipe, to be used in district No. 2. Work will be begun in the spring.

ELYRIA, O.—Bids are asked until Nov. 26 for building a sewer in West St. W. H. Park, Clk. Council.

PIQUA, O.—C. E. Martin, Piqua, has been awarded the contract for building a 4-ft. sewer in Swift St., at $4,124.

TOLEDO, O.—Bids are asked until Dec. 5 for constructing 15 and 12-in. pipe sewers in two streets. L. P. Harris, Cy. Clk.

LAKE LINDEN, MICH.—Press reports state that the citizens are in favor of a system, and it is probable that the question will be voted upon in the spring.

MILWAUKEE, WIS.—The council has been petitioned to build sewers for the Merrill Park district. Walter Stratton, Supt. Sewers; William Murphy, Chn. Com.

MASON CITY, IA.—Bids are asked until Dec. 2 for constructing 7,,060 ft. of 20 to 15-in. pipe sewers; as stated in our advertising columns. Geo. W. Brett, Mayor; W. P. Fitch, Cy. Clk.

NEWTON, KAN.—The South Side Sewer Co. has been granted a franchise to operate a system already built.

ST. LOUIS, MO.—Bids are asked until Dec. 6 for constructing 15 and 12-in. pipe sewers in several streets. Robt. E. McMath, Pres. Bd. Local Improvements.

SEATTLE, WASH.—The question of building sewers in certain streets will be considered by the council Dec. 5. Wm. H. Parry, Cy. Clk.

GRASS VALLEY, CAL.—This place voted Nov. 8 to issue $40,000 in bonds for a system. It is stated that arrangements will be made by the village trustees at once for building the system.

SANTA ANA, CAL.—Williams, Belcher & Co., San Francisco, have the contract for constructing the lateral system at about $37,000. The Los Angeles Sewer Pipe Co., Los Angeles, will furnish the pipe. Work will begin before Dec. 1.

WINNIPEG, MAN.—It is proposed to construct sewers in two streets, at a cost of about $3,500. C. J. Brown, Clk.

VANCOUVER, B. C.—The residents of the West End have petitioned the council to take immediate steps toward the construction of the proposed extension to the system in that part of the city. Aldermen Brown and McMorran may be addressed.

CALLAO, PERU, S. A.—Press reports state that the city authorities have asked the National Manufacturers' Association, Philadelphia, Pa., for specifications for a sewerage system and a drainage system.

GARBAGE DISPOSAL—STREET CLEANING

JERSEY CITY, N. J.—Bids were asked until Nov. 23 for sweeping and cleaning the streets and for removing the ashes and garbage for one year from Dec. 1. The estimate of quantities is as follows: About 1,602 miles of stone pavement swept and cleaned; about 545 miles of asphalt pavement. Jas. S. Nolan, Chn. St. Com.

PHILADELPHIA, PA.—Bids are asked until Dec. 5 for cleaning streets, inlets and public market houses, and the removal of ashes, sweepings, cut grass, household and store waste; for the removal and disposal of kitchen garbage, dead animals, etc.; also for furnishing teams and labor for removing snow from streets surrounding the city hall and the footways of highway bridges crossing the Schuylkill River during the year; and separate bids for the removal of snow from streets specified. Thos. M. Thompson, Dir. Dept. Pub. Wks.

CINCINNATI, O.—Judge Miller Outcalt has in preparation an ordinance to change the present system of handling garbage in Cincinnati. May 27, 1892, the B. of L. passed an ordinance granting to what is now known as the Cincinnati Sanitary Co. the right for ten years to dispose of all the city garbage delivered to the company. The average price per annum that the city, under the contract, is now paying the company is $21,000. The city records show that this contract was made on the recommendation of Dr. Prendergast, who at that time was Health Officer. In his ordinance, Judge Outcalt proposes to not only remove all of the vegetable garbage, but, at the same time, pay the city a sum of money for the same.

CLEVELAND, O.—Local papers state as follows: Health Officer Hess has completed specifications for the collection, removal and destruction of refuse other than garbage, in accordance with a resolution adopted by the citizens' garbage commission. There are 23 sections in the specifications, the most important being the following: Contractors may bid for the collection and removal or the reduction or destruction of the refuse separately or collectively, and no bid will be considered unless accompanied by a check for $10,000. It is estimated that the quantity of refuse to be handled annually is about 11,000 yards, and the bids must be on that basis; bidders must give a guarantee that they will build and put in working order a plant of ample capacity to dispose of the refuse each 24 hours, the work to be begun on the plant within 30 days of the execution of the contract, and to be completed within 120 days thereafter; all collections are to be made between 9 p. m. and 5 a. m.; the contractor shall not be permitted to dump any of the refuse in the lake, river, or any other stream of water within the city limits, nor shall it be disposed of by burying or used for fertilizing purposes until chemically reduced satisfactorily to the health officer; at the expiration of any contract entered into under the specifications the city shall have the right to purchase the plant for the collection, removal and destruction of the refuse.

ALAMEDA, CAL.—B. F. Lamborn, Cy. Clk., writes us that a San Francisco company has applied for a franchise for building and operating a garbage disposal plant. No action has yet been taken.

SAN FRANCISCO, CAL.—Superior Judge Cook has decided that the garbage franchise is only exclusive so far as the county is concerned, and that the scavenger men may move garbage from the county.

STREETS AND ROADS.

NEWTON, MASS.—The aldermen have appropriated $2,100 for the improvement of Walnut St., and are considering a general appropriation of $39,500 for highways.

BROOKHAVEN (L. I.), N. Y.—The county supervisors have appropriated $13,369 for highway work in this town.

HAMILTON, N.Y.—DeWitt C. Hadcock, Stockbridge, N.Y., writes us that the proposed road from Hamilton to Oneida, 18 miles long, will be covered with crushed stone 18 ins. thick and 50 ft. wide, to cost about $50,000.

ROCHESTER, N. Y.—Resolutions have been passed to pave portions of Alexander St., with asphalt; estimated cost, $8,000; Thrush St., asphalt, $26,000, and South Fitzhugh St., asphalt, $11,180. Peter Sheridan, Cy. Clk.

ELIZABETH, N.J.—The council passed an ordinance Nov. 15 for the paving of Magnolia Ave., between Spring and Division Sts., with asphalt, 20 ft. wide.

JERSEY CITY, N. J.—Reports state that Henry Byrne has been awarded a contract for the improvement of Greenville Ave., from the Old Bergen Road to the Boulevard.

JERSEY CITY, N. J.—Bids are asked until Nov. 29 for about 2,300 cu. yds. of earth excavation, 4,300 sq. yds. of asphalt, 3,060 lin. ft. of curbing, etc., on Prospect St. Geo. T. Bouton, Clk. St. Comrs.

MAYS LANDING, N. J.—We are informed that the county board of freeholders has accepted the new gravel road from Mays Landing to Egg Harbor City, a distance of 7 miles. The board, in company with State Comr. of Pub. Roads, H. I. Budd, inspected the site of a proposed new road from Atlantic City to Longport, and ordered J. J. Albertson, Magnolia, N. J., to make a survey and estimates, to be presented in January.

MORRISTOWN, N. J.—Bids are asked until Nov. 29 for macadamizing in Washington township, according to reports. M. B. Lum, Dir. Bd. Freeholders.

ALTOONA, PA.—It is reported that the question of issuing $229,000 in bonds for paving is being considered by the council.

READING, PA.—Bids are asked until 3 p. m., Nov. 24, for 1,700 sq. yds. of asphalt paving. Sam. S. Hoff, Cy. Engr.

WILKINSBURG, PA.—Bids are asked until Dec. 1 for the purchase of $30,000 of 4% street improvement bonds. Arthur Stuart, Chn. Finance Com.

SCOTTSBORO, ALA.—The county commissioners are considering the question of issuing $200,000 in bonds for new turnpike roads.

NEW ORLEANS, LA.—Bids are asked until Nov. 28 for improving Jordan Ave. W. S. Douglas, Comptroller.

LAWRENCEBURG, KY.—A contract to lay brick paving has been awarded to W. A. Newman, Lexington, Ky. J. W. Waterfill, Cy. Clk.

LOUISVILLE, KY.—Bids are asked until Nov. 29 for constructing a granolithic sidewalk on Hill St. Chas. F. Granger, Pd. Pub. Wks.—The board will soon readvertise the asphalt work on East Broadway, West Chestnut, Hepburn Ave. and Von Borries Ave., for which bids have been rejected.

WINCHESTER, KY.—Bids are asked by the county commissioners until Dec. 1 for the purchase of $50,000 of 4% turnpike bonds.

CAMBRIDGE, O.—A petition will be presented to the county commissioners Dec. 5 for the construction of a road. B. C. Johnson may be addressed.

HAMILTON, O.—New bids will be asked by the city clerk for paving on Second St., with asphalt.

SANDUSKY, O.—Reports state that it is proposed to lay 9,749 sq. yds. of paving and 5,200 lin. ft. of curb on Campbell St.; estimated cost, $17,939. I. C. Brewer, Cy. Engr.

TOLEDO, O.—Bids are asked until Dec. 5 for furnishing the material and paving Kenilworth Ave., from Fulton to Cherry St., with Buckeye blocks, etc. L. P. Harris, Clk.

CROWN POINT, IND.—Bids are asked until Dec. 17 for constructing about 20 miles of macadam roads, as stated in our advertising columns. Michael Grimmer, County Audr.

ELKHART, IND.—It is reported that a resolution is before the council for 40,000 sq. yds. of brick paving. D. F. Cordrey, Cy. Engr.

INDIANAPOLIS, IND.—Bids are asked until Nov. 28 for constructing cement sidewalks, grading, etc., on portions of ten streets. M. A. Downing, Bd. Pub. Wks.

TERRE HAUTE, IND.—At the election Nov. 8 Linton township voted to construct 14 miles of gravel roads, and Nevins township 17 miles of gravel roads; estimated cost, about $47,000.

KALAMAZOO, MICH.—The city engineer has estimated the cost of paving on certain streets, which it is desirable to have paved with brick: Main St., from Portage to Church St., $17,146; Main St., from Church to Park St., $4,533; Portage St., from East Main to South St., $5,036; West South St., from South Burdick to Rose St, $4,156, and $6,138 for asphalt. Address Alderman Westbrook.

OWOSSO, MICH.—A petition was presented to the council Nov. 14 for four blocks of asphalt paving.

MOLINE, ILL.—A petition is in circulation to pave all the streets and avenues from and including 5th Ave. to 12th Ave., and between 7th and 15th Sts.

PEORIA, ILL.—An ordinance will be presented to the council for brick paving on South Madison Ave., from Fulton to Franklin St., and Elizabeth St., from High to Main St. The board of local improvements has adopted a resolution to have the engineer submit estimates at the next meeting for brick paving on St. James St. and on 7th Ave.

ST. PAUL, MINN.—Bids are asked until Nov. 28 for grading Rondo St., from Western Ave. to St. Anthony Ave. C. H. Bronson, Clk. Bd. Pub. Wks.

TOPEKA, KAN.—A petition will be presented to the council for paving Huntoon St., 30 ft. wide, from Topeka Ave. to Fillmore St., with brick.

KANSAS CITY, MO.—Bids are asked until Nov. 28 for furnishing the material and for constructing sidewalks of brick, stone and plank, and grading, on certain streets. Henry A. Wise, Cy. Engr.

OMAHA, NEB.—Bids are asked until Dec. 2 for paving with sheet asphalt, brick or stone and curbing on 22d St. Andrew Rosewater, Chn. Bd. Pub. Wks.

HOUSTON, TEX.—Bids are asked until Jan. 9 for repairing about 2,700 lin. ft. of curbing, etc., on Main St. I. A. Miller, Cy. Engr.; P. S. Banner, Secy.

SEATTLE, WASH.—Bids are asked until Dec. 5 for grading Blanchard St., from 1st St. to Western Ave. W. H. Parry, Cy. Clk.

PERKINS, CAL.—The county surveyor will make a survey for the macadamizing of one mile of the road from Perkins to Walsh's Station.

MANUFACTURING PLANTS.

SOUTH HADLEY, MASS.—B. F. Perkins & Son, of Holyoke, Mass., contemplate improving its Stony Brook paper mill, to cost $20,000.

HARTFORD, CONN.—It is reported that a silk manufacturing concern of Lyons, France, contemplates establishing a branch factory in this vicinity, and wish to form a local company to erect a $40,000 building. Oppenheim & Co., of New York, are said to be interested.

BROOKLYN, N. Y.—A fire in this city Nov. 18 destroyed several buildings on Manhattan Ave. and Java St., Greenpoint; estimated loss, $102,900.

FALL RIVER, MASS.—It is reported that James Marshall will erect a one-story building, 165 × 85 ft., and a 4-story building, 210 × 86 ft., in this city for the manufacture of hats.

MIDDLETOWN, CONN.—The E. T. Burgess Cut Glass Co. has voted to increase its capital to $50,000, so as to enlarge its plant.

NEWBURGH, N. Y.—John P. Convery has the contract for the erection of a 2-story brick addition, 39 × 53 ft., to the factory of the Granite City Soap Co., on Liberty St.

SCHUYLERVILLE, N. Y.—The Liberty Wall Paper Co., Nov. 15, received the following bids for the erection of a 2-story building, 400 × 100 ft., with separate engine and boiler house; Archs., M. F. Cummings & Son, Troy, N. Y.:

Lee Bros., Glens Falls, N. Y.	$55,700
Acker & Sons, Glens Falls, N. Y.	55,500
T. W. Riley, Sandy Hill, N. Y.	54,900
Monty, Higley & Co., Sandy Hill, N. Y.	54,800
Ranger & Co., Holyoke, Mass.	54,790
J. H. Findley, Cleveland, O	54,850
J. C. Fuller, Mechanicsville, N. Y. (accepted)	50,600
Bulmer & Haynes, Troy, N. Y.	54,790
Chas. P. Roland, Troy, N. Y.	53,944

WEST BRIGHTON (S. I.), N. Y.—A fire on Nov. 19 destroyed the greater part of the Starin plant, which extends over 2,000 ft. on the water front of the Kill von Kull; loss on the buildings, about $30,000, and on machinery, $400,000.

NEW BRUNSWICK, N. J.—The factory of the P. Carter Bell Co., manufacturers of a rubber substitute, in Highland Park, was destroyed by fire Nov. 11.

BRADDOCK, PA.—The Braddock Wire Co., according to reports, will erect an addition to the plant, costing about $200,000.

CARBONDALE, PA.—Reports state that the Delaware & Hudson Canal Co. will erect a washery near the Racket Brook breaker culm pile.

PHILADELPHIA, PA.—It is reported that James Armstrong will erect a 2-story brick factory building, 35 × 60 ft., on Boudinot St.

HARRISBURG, PA.—Contracts will be let this week, according to local papers, by the Harrisburg Foundry & Machine Co., for a 2-story brick and stone building, 140 × 260 ft. The new plant will cost about $200,000, and is noted in another column under "Industrial Notes." Wm. R. Fleming, Gen. Mgr.

PHOENIXVILLE, PA.—David Reeves, Pres. of Phoenix Iron & Bridge Co., is reported as stating that the company will erect four open-hearth furnaces, with a capacity of 40 tons of steel at a heat, thus doubling the capacity of the present plant.

WEST READING, PA.—A fire in this city Nov. 12 destroyed the plant of the Keystone Cycle Works on 2d Ave.; loss, about $75,000; insurance, $27,000. Reports state that it will be rebuilt at once.

YORK, PA.—Gilbert & Co. have been awarded the contract for the construction of a paper factory, with a capacity of 10 tons a day. J. T. Kopp and C. F. Black, Jr., are interested.

WILMINGTON, DEL.—The Johnson Forge Co. contemplates enlarging its plant.

BALTIMORE, MD.—The factory of the Carr-Lowry Glass Co. in Westport, a suburb of this city, was destroyed by fire Nov. 15; estimated loss, $125,000; insurance $85,000. It will probably be rebuilt at once.

NORFOLK, VA.—The plow factory of S. R. White on Water St. was damaged by fire Nov. 11; loss about $50,000, covered by insurance.

WHITNEY, S. C.—The Whitney Mfg. Co. has increased its capital from $190,000 to $226,000, for the purpose of enlarging its plant.

ANNISTON, ALA.—The Hercules Pipe Co. is reported to have purchased the old bloomery plant at this place. It will be refitted and an additional building, 30 × 60 ft., erected. Chas. M. Noble is interested.

ENSLEY, ALA.—J. M. Meighan & Co., Birmingham, Ala., have been awarded the contract for erecting the new buildings for the Alabama Steel & Wire Co., at Ensley. The Garrett Engineering Co., Cleveland, O., is said to have the general contract for the entire plant. G. H. Schuler, Secy. of Alabama Steel & Wire Co., of Cleveland.

CLEVELAND, O.—Reports state that the E. R. Edson Co. will erect a new plant with double the capacity of the present one.

COLUMBUS, O.—W. A. Shaw, according to reports, will remove his shoe factory from Rochester, N. Y., to West LaFayette St., in this city.

CHICAGO, ILL.—The Illinois Steel Co., according to reports, will erect a foundry costing from $100,000 to $200,000.

GLENDIVE, MONT.—Clayton & Hagan have awarded the contract for erecting a cold storage warehouse, to John Deberge.

PORT ANGELES, WASH.—The Port Angeles Glass Co. is said to contemplate erecting a plant at this place.

MONTREAL, QUE.—Reports state that George Taylor, of Toronto, will establish a large pulp mill near this city.—The bolt and nut works of Pillow & Hersey, on Mill St. were damaged by fire Nov. 12.

MARLBANK, ONT.—Lathbury & Spackman, Philadelphia, Pa., have been engaged to remodel the old London Portland Cement Co.'s plant at this place.

NICE, FRANCE.—Consul Van Buren, at Nice, reports that two companies are being formed there for the manufacture of cement and plaster. Frederick Repossi, Commission Agent, 9 Rue d'Amerique, Nice, may be addressed.

DRESDEN, GERMANY.—O. C. Barber, Pres. of Diamond Match Co., is arranging for the erection of a factory at this place, according to reports.

GAS PLANTS.

EVERETT, MASS.—A contract has been awarded to the Riter-Conley Mfg. Co., Allegheny, Pa., for constructing the steel frame for the purifying plant, 100 × 270 ft., for the New England Gas & Coke Co., according to reports.

WATERBURY, CONN.—Reports state that the United Gas Improvement Co. has awarded a contract to the Berlin Iron Bridge Co., East Berlin, Conn., for the steel work in the construction of a new generating room and an engine room.

SOUTH NORWALK, CONN.—The Norwalk Gaslight Co. has been purchased by a syndicate of New York capitalists at $227,500 including the charter and franchise for the whole of Fairfield county, outside of Bridgeport. The new company will spend about $200,000 to $300,000 in enlarging and developing the works, according to reports.

NIAGARA FALLS, N. Y.—Plans for a new plant for the Acetylene Gas Co. have been completed, and work will be commenced about Jan. 1, according to reports.

NEWARK, N. J.—Reports state that the gas companies of Newark, Orange, South Orange, Montclair and Summit, N. J., are to be consolidated by the Union Gas Improvement Co., Philadelphia, Pa. The new incorporation will have a capital stock of about $10,000,000.

DARBY, PA.—D. J. Collins and F. H. Shelton, Philadelphia, have purchased the Darby Gas Works and franchise. A new plant will be erected and the mains extended to neighboring towns, in the spring.

CHATTANOOGA, TENN.—It is reported that C. H. Caldwell, Batavia, N. Y., and F. F. Smith, Chattanooga, propose to manufacture acetylene gas.

EAST LIVERPOOL, O.—The Alum Cliff Gas Co. has in contemplation the erection of a pumping station near Williamsport, to have a daily capacity of 1,000,000 cu. ft.

FINDLAY, O.—William A. Cutter, Buffalo, N. Y., has made a proposition to the board of city gas trustees for the purchase of the city's gas plant for $150,000 cash. The matter has been taken under advisement, according to reports.

TOLEDO, O.—A resolution has been passed by the council to lay gas and water pipes and connections on Milburn Ave. and Monroe St. L. P. Harris, Cy. Clk.

PONTIAC, ILL.—Reports state that a company has been organized, with a capital stock of $40,000, to construct and operate a gas works. Dr. J. Allen and B. F. Jones, Pontiac, and Isaac Eastman, Monmouth, Ill., are interested.

VANCOUVER, B. C.—The Vancouver Gas Co. is contemplating the extension of its system, including a new pipe line over Mount Pleasant, according to reports.

NEW COMPANIES.—Chester Light & Heating Co., West Chester, N. Y.; to manufacture acetylene gas; W. A. Lawrence, Pres.; C. W. Kerner, Secy.; Geo. M. Rce, Treas.; Joseph Board, Dr. C. P. Smith, J. D. Millspaugh, R. H. Marvin and Frank Durland.

Youngstown Acetylene Co., Youngstown, O.; $10,000; to manufacture acetylene gas for lighting purposes; Emanuel Hartzell, Pres.; John M. Davis, Vice-Pres.; Dan Jones, Secy.; William Wallace, Treas.; John Sylvanus, Mgr.

United Gas Co., Cambridge, O.; $150,000; to develop natural gas territory; George W. Crawford, E. W. Trest, F. W. Crawford, O. C. Hogan and Robert Daily.

Columbia Oil Co., Los Angeles, Cal.; $200,000; to acquire store, pipe, etc., oil and natural gas; L. E. Mosher, Harry Chandler, W. B. Scott, Los Angeles; Guy L. Hardison, W. H. Hardison, Santa Paula, Cal.

Southern Oil Co., Bradford, Pa.; $750,000, with $500 paid in; to operate for oil and gas; T. M. Barnsdall, Wm. Barnsdall, Jr., E. P. Whitcomb, Bradford, Pa.; A. W. Lewis, W. J. Burke, Pittsburg, Pa.

Central Oil & Land Co. Cincinnati, O.; $50,000, with $1,000 paid in; to bore for oil and gas; Wm. Boswell, H. A. Stewart, L. Schultz, Jr., J. H. Huxell, S. F. Boswell, Cincinnati, O.

Gallagher Oil Wells Agitator Co., Pittsburg, Pa.; $300,000, with $800 paid in; to own a patent for cleaning oil wells and to drill for oil, gas, etc.; Wm. E. Walsh, Henry F. Gilg, Allegheny, Pa.; E. W. Beach, Robt. T. Rossell, F. A. McKenry, Pittsburg, Pa.

Kitson Hydro-Carbon Light & Heat Co., Pine Bluff, Ark.; $100,000; Pres., Z. Orto; Vice-Pres., I. Dreyfuss; Secy. and Treas., J. H. Hudson; J. W. Crawford, S. Geisreiter, N. B. Truelock, J. W. Withers, H. W. Perry.

Citizens Gas & Fuel Co., Mohawk, Ind.; $1,000.

MISCELLANEOUS CONTRACTS.

BELL TOWER.—New Orleans, La.—Bids are asked until Nov. 28 for erecting a bell tower on the Second St. Market. W. S. Douglass, Comptroller.

CONDUITS.—New Rochelle, N. Y.—Reports state that the Phoenix Telephone Co. is planning to lay conduits at once. C. W. S. Wilson, Village Engr.

TELEPHONE WORK.—Greensburg, Pa.—The Bell Telephone Co., will change the exposed wires to the cable system in the near future, according to reports.

DREDGING.—New York Bay, N. Y.—Bids are asked until Dec. 7 for dredging opposite 49th St., Brooklyn. Jas. Kane, Comr. Sewers, 265 Broadway, New York.

POLICE PATROL SYSTEM.—Youngstown, O.—Bids are asked until Dec. 8 for replacing the central office outfit of the police patrol system. H. W. Calvin, Clk.

GUN FORGINGS.—Washington, D. C.—Bids are asked until Nov. 26 for furnishing 12 sets of 12-in. gun forgings. Chas. O'Neil, Chief of Ordnance Bureau, Navy Dept.

PIER IMPROVEMENTS.—Sydney, N. S.—The Dominion Coal Co. proposes to make extensive repairs and improvements at the intercolonial pier, according to reports.

CLOCKS.—Troy, N. Y.—Bids are asked until Dec. 1 for furnishing a system of clocks for the court house. M. F. Cummings & Son, Archs.; Eugene L. Demers, Comr.

TUNNEL.—Boston, Mass.—Local papers state that the transit commission is about to ask for bids for constructing the first section of the proposed East Boston tunnel.

WHARF.—Greenville, N. J.—A petition will be presented to the board of street and water commissioners for the construction of a wharf at Browns Place, New York Bay.

AMBULANCE.—New York, N. Y.—Bids are asked until Nov. 21 for building one ambulance for Bellevue Hospital. J. W. Keller, Pres. Dept. Pub. Charities, East 26th St.

FIRE HOSE.—Buffalo, N. Y.—Bids are asked until Dec. 9 for furnishing 3,500 ft. of 2½-in. and 1,000 ft. of 3½-in. cotton rubber-lined fire hose. W. S. Grattan, Fire Comr.

PARK.—Trenton, N. J.—A resolution was introduced in the council Nov. 15 providing for the laying out of a park on the ground in the rear of the State Capitol building.

PARK WORK.—Arlington, Mass.—The town voted Nov. 15 to appropriate $45,000 for the improvement of the shores of Spy Pond, and constructing a boulevard around the pond.

TELEPHONE SYSTEM.—Berea, O.—A franchise has been granted to Samuel Rawson and M. B. Brush, of the Rawson Electric Co., Elyria, O., to operate a telephnoe system.

TELEPHONE LINE.—Melbourne, Fla.—It is reported that Simmons Bros., Mountville, S. C., are securing subscribers for a telephone line to run between Ormond and Melbourne.

BOILERS.—Honolulu, H. I.—Bids are asked until Dec. 12 for furnishing two boilers for dredges. Jas. A. King, Minister of Interior, Hawaiian Consulate, 65 Wall St., New York.

PINE TIMBER.—New York, N. Y.—Bids are asked until Dec. 2 for furnishing about 1,683,872 ft. B. M., of sawed yellow pine timber. J. Sergeant Cram, Comr. Docks, Pier A, North River.

TUNNEL.—Point Edward, Ont.—Reports state that the Canadian Pacific Ry. Co. proposes to construct a tunnel under the St. Clair River, at this place. The right of way has been secured.

TELEPHONE.—Springfield, Ohio.—A 25-year franchise was granted F. R. Marsh, as trustee of a new telephone company in this city. It is stated that 256 subscribers have been secured.

DREDGING.—Buffalo, N. Y.—Jas. B. Donnelly, Buffalo, was awarded a contract Nov. 11, at $25,988, for dredging a portion of the Erie Basin. Geo. W. Aldridge, Supt. Bd. Pub. Wks., Albany.

FIREHOSE.—Seattle, Wash.—Bids are asked until 10 a. m., Nov. 25, for furnishing 4,000 ft. of 2½-in. rubber or cotton jacket fire hose, with couplings. Frank Oleson, Secy. Bd. Pub. Wks.

SUPPLIES.—Toronto, Ont.—Bids are asked until Dec. 5 for furnishing lumber, gravel, paving brick, sewer pipe, brass and bronze castings, lead pipe, iron pipe, iron and steel, etc. John Shaw, Mayor.

CONDUITS.—Newark, N. J.—A resolution has been presented to the street and water commission by Commissioner Van Duyne, to require all electric and telephone wires to be placed in underground conduits.

TELEPHONE FRANCHISE.—Duluth, Minn.—Alderman Crossweller has introduced a resolution to ask bids for a franchise for telephone service. The franchise of the Duluth Telephone Co. expires next spring.

WING DAM.—Winona, Minn.—The government has awarded a contract to John Pickley, Dubuque, Ia., at $36,000, for constructing a wing dam on the Mississippi River, below this place, according to reports.

TELEPHONE FRANCHISE.—York, Pa.—W. A. Myers, L. B. Wampler, Lionel Emdrie, R. Hawkins and John Dobbling, all of York, applied to the council Nov. 14 for a franchise to organize the York Underground Conduit Co.

CONDUITS.—Spokane, Wash.—Manager Hopkins, of the Inland Telephone & Telegraph Co., states that the company is contemplating the removal of its wires from the poles and placing them underground. It will cost about $100,000.

PARK WORK.—Chicago, Ill.—The Lincoln Park commissioners are considering the advisability of extending the park from Ohio St. to Diversey Ave., extend the shore line 1,200 ft. into the lake, build a permanent sea wall and to fill in the area between the new shore line and the present limits.

WALL.—Boston, Mass.—Bids are asked until Dec. 5 for building a wall of quarry-faced granite or seam-faced Roxbury stone at Jamaica Park; bond, $2,000. Address Chas. E. Stratton, Latan Pratt, Park Comrs., Jamaica Park, Boston.

BULKHEAD AND FILLING.—Boston, Mass.—Bids are asked for filling and building a bulkhead at the Fens, between Beacon St., and the Harbor Commissioners' line; bond, $4,000. Address Chas. E. Stratton and Laban Pratt, Park Comrs.

TELEPHONE WORK.—San Francisco, Cal.—The Peoples Mutual Telephone Co. has applied to the board of supervisors for an extension of one year's time, to expend $100,000 in improving the system, as provided in the franchise.

REVETMENTS.—Keweenaw Point, Mich.—Bids are asked until Dec. 20 for constructing pile and timber revetments for ship canals across Keweenaw Point, as stated in our advertising columns. Maj. Clinton B. Sears, U. S. Engr., Duluth, Minn.

BUOYS, ETC.—Ottawa, Ont.—Chief Engineer Anderson, Dept. Pub. Wks., has recommended that 25 additional spar buoys be placed in the St. Lawrence channel, between Montreal and Quebec, and also six range lights for which foundations are now being built.

GRANITE STONES.—New York, N. Y.—Bids are asked until Dec. 2 for furnishing about 542 headers and 543 stretchers, containing about 21,446 cu. ft., and 125 coping stones containing about 10,000 cu. ft. J. Sergeant Cram, Comr. Docks, Pier A, North River.

STONE HEADS.—Newark, N. J.—Bids are asked until Dec. 5 for furnishing and constructing stone heads to subways Nos. 1 and 2 under the driveway at Branch Brook park, as described in our advertising columns. A. Church, Secy., Essex County Park Comn., 800 Broad st.

TELEPHONE CONCESSION.—Shanghai, China.—Bids are asked by the council until March 31 for the purchase of a 30-yr. franchise to supply the community with telephone service, as described in our advertising columns. Address Blackall & Baldwin, 39 Cortlandt St., New York.

CANAL.—Lakes Superior and Michigan.—Reports state that a company has been organized by Chas. W. Parker and A. H. Parker, 58 State St., and D. C. Dennison, 78 State St., Chicago, Ill., with a capital stock of $60,000, to construct a ship canal from Lake Superior to Lake Michigan; estimated cost, about $7,000,000.

SHAFTING, PULLEYS, BRICK, ETC.—Yazoo City, Miss.—We are informed that the Yazoo Improvement Co. is putting in new boiler, Corliss engine, pump, etc. It is in the market for a line shaft, friction clutch, friction and fixed pulleys, stands, pillow blocks, belting, fire brick, cement, steam fittings, pipe covering, sewer pipe poles, etc.

PARK WORK.—Oakland, Cal.—A proposition was submitted to a vote Oct. 29 to issue bonds for park work as follows: For the purchase of Adam's Point, 62 acres, $240,000; for the improvement of the same, $50,000; for the improvement of West Oakland Park, $20,000; for the improvement of Independence Square, East Oakland, $10 000.

PARK WORK.—Detroit, Mich.—The park board has accepted plans for the improvement of Palmer Park and for constructing a new driveway leading to the park, from Woodward Ave., about one-half mile in length. ——Park Commissioner Moecker has been instructed to prepare plans for the improvement of the grounds around the pumping station, including the construction of stone bridges.

NAVAL SUPPLIES.—Washington, D. C.—Bids are asked until Nov. 29 for furnishing 10 doz. galvanized buckets, 14 qt.; 2,856 ft. of cast iron water pipe, cast iron bends, etc.; 16,400 ft. of galvanized wrought iron lap-welded water pipe, reducers, ells, tees, etc.; 38 brass globe valves; about 1,500,000 brick; 1,000 bbls. Portland cement; 100 bbls. rock lime; about 4,000 to 5,000 doz. files of various sizes, and for constructing one hydraulic glue press. Edwin Stewart, Paymaster Gen.

CANAL WORK, ETC.—Albany, N. Y.—Bids are asked until Nov. 28 for reconstructing the banks and channel of Glen Creek, at Watkins; improving the channel of Newtown Creek, Horseheads; building a dam across Saranac River, at Saranac Lake; constructing a lighthouse on Cayuga Lake, at State Pier, Cayuga; improving the Cayuga Branch of the Cayuga and Seneca Canal, from Lock No. 10 to Cayuga Lake, and for constructing vertical walls on the tow-path side, building crosswalks, pointing old masonry and building gas pipe railing at First and Oneida St. bridges, Fulton. Geo. W. Aldridge, Supt. Pub. Wks.

TELEGRAPH CABLES.—St. Louis, Mo.—Bids are asked until Nov. 28 for furnishing the materials and for installing fire alarm telegraph cables. The following are the approximate quantities of cables to be installed: 2 conductor, 48,240 ft.; 4 conductor, 3,600 ft.; 6 conductor, 4,200 ft.; 8 conductor, 2,300 ft.; 9 conductor, 1,000 ft.; 10 conductor, 2,200 ft.; 11 conductor, 500 ft.; 12 conductor, 1,200 ft.; 14 conductor, 2,000 ft.; 15 conductor, 900 ft.; 17 conductor, 2,100 ft.; 19 conductor, 2,800 ft.; 24 conductor, 1,200 ft.; 26 conductor, 1,700 ft.; 34 conductor, 1,100 ft.; 36 conductor, 1,700 ft. Silas Benedict, Supt. Fire and Police Telegraph; Isaac H. Sturgeon, Comptroller.

REMOVING WRECK.—Rockland Harbor, Me.—We are informed that the following bids were received Nov. 14 for removing the wreck of the schooner "William H. Jones," as advertised in Engineering News. Maj. R. L. Hoxie, U. S. Engr., Portland, Me.:

Enoch Townsend, Linwood, N. J.	$1,898
Wm. H. Virden & John C. Ross, Lewes, Del.	1,400
Chas. W. Johnston, Lewes, Del.	565
John F. Hamilton, Portland Me.	1,700
Solon S. Andrews, Gorham, Me.	749
Moore & Wright, Portland, Me.	1,450

CONTRACT PRICES.

WATER PIPE.—Pueblo, Colo.—The following bids were received by the north side water trustees Nov. 1, 1898, for furnishing 13,000 ft. of 12-in. and 2,000 ft. of 6-in. pipe, which will be used in constructing new water mains in the northwestern portion of the city: Colorado Fuel & Iron Co., $24 a ton; M. W. Strong, $26.75; R. D. Wood & Co., Philadelphia, $30.50; J. B. Clow & Sons, Chicago, $27.90. The bid of the C. F. & I. Co., at $24 a ton for 6 and 12-in. pipe, and $45 a ton for special pipe was accepted. The terms of payment being 25% cash and balance to be represented by the votes of the board in sums of $1,000 each due in two years.

ELECTRIC LIGHTING.—Rock Island, Ill.—The council received the following bid Nov. 17, 1898, for a combination system of high and low electric lights: People's Power Co., with 2,000-c. p. arc lights—Low lights, for a term of two years, every night and all night, $84 a year; Philadelphia schedule, $74; for three years, all night and every night, $79; Philadelphia schedule, $69; for five years, every night and all night, $75 a year; Philadelphia schedule, $64. Tower lights for a term of two years, every night and all night, $96 a year; Philadelphia schedule, $86; for three years, every night and all night, $91 a year; Philadelphia schedule, $81; for five years, all night and every night, $85; Philadelphia schedule, $74—$5 to be added to the above figures if less than 160 lights are ordered.

PUBLIC LIGHTING.—Seattle, Wash.—The board of public works received the following bids Oct. 31, 1898, for public lighting: Union Electric Co.—Arc lights, each, a month, $8.80; 15 c. p. incandescent, each, a month, $1.32; 30-c. p., each, a month, $1.95. This company, which at present has the city contract, stated in a note accompanying its bid that the reason for a slight advance in prices is caused, first, by the fact that the company raised its employees' wages from 10 to 15% during the past year, and, second, that the price of coal has advanced fully 25% since the last contract was let.

Consumers' Electric Co.—Arc lights, $9; 15-c. p. incandescents, $1.40; 30-c. p., $2.10, and for additional lights, arc, $8.75; 15-c. p., $1.30; 30-c. p., $1.90. The Seattle Gas & Electric Co. offered to put in 100 60-c. p. Welsbach lights at $2 a month. The Snoqualmie Falls Power Co. offered to furnish arc lights in the First, Fourth, Fifth and Sixth Wards, as now distributed, at $7 a month.

LEVEE WORK.—New Orleans, La.—The following contracts were let Nov. 10, 1898, by the U. S. engineers for levee work: St. Rosalie levee, 38,000 cu. yds., Wade Bros. Construction Co., St. Louis, 13½ cts. a cu. yd.; St. Ann levee, 9,900 yds., Michael Cullen, New Orleans, 13.25 cts. a cu. yd.; the Treadaway levee, 11,400 cu. yds., 11.88 cts., and the Butler levee, 1,900 cu. yds., 11.88 cts., were also awarded to Michael Cullen.

ELECTRIC LIGHTING.—Camden, N. J.—The following bids were received from the Citizens' Light, Heat & Power Co., recently incorporated, by the council, Nov. 16, 1898, for lighting the city with electricity from July 1, 1899: One year, arc and incandescent lights, according to plans and specifications; arc lights on poles or arms, 45 cts. a light a night; on underground cables, 60 cts. a night; incandescent lights on poles, 10 cts. a light; on underground cables, 12 cts. a light a night. Three years, arc lights on poles, 40 cts. a light a night; underground wires, 55 cts.; incandescent lights, overhead wires, 8½ cts. a light; incandescent lights, underground cables, 10 cts. a light. Five years, arc lights on arms, 34 cts. a night; arc lights on underground wires, 50 cts.; incandescent lights on posts or arms, 7 cts. a light a night; incandescent lights on underground wires, 9½ cts. The Camden Lighting & Heating Co. declined to put in a bid on account of an order of the court. The committee laid the bids over until after the action of the court. The bids of the Camden Lighting & Heating Co. were $138 a year for arc lights, and $20 a year, or 6 cts. a light a night, for incandescent lights. The bids of the new company, 7 cts. and 9½ cts. a light a night.

PAVING.—Dallas, Tex.—The following bids were received by the council, Nov. 14, 1898, for paving in certain streets: Gilsonite Roofing & Paving Co., St. Louis, excavating, 50 cts. a cu. yd.; remove the bois d'arc blocks, 7 cts. a sq. yd.; lay 6 ins. of concrete, 55 cts. a sq. yd.; 2 ins. of asphalt, $1.60 a sq. yd. C. W. Olcott, Dallas, vitrified brick pavement and furnish all materials, tools and labor, to remove bois d'arc blocks, 8 cts. a sq. yd.; excavation, 20 cts. a cu. yd.; lay No. 1 concrete, 63 cts. a sq. yd.; No. 2 concrete, 76 cts.; brick surface, 97 cts. Texas Construction Co., Galveston, lay 2 ins. No. 1 concrete, $1.89 a sq. yd.; No. 2 concrete, $2; No. 4 concrete, $1.74; grading, 10 cts. a cu. yd.; removing bois d'arc blocks, 8 cts. a sq. yd. Standard Light & Power Co., Dallas, grading, 35 cts.; remove bois d'arc blocks, 10 cts.; lay No. 1 concrete, 75 cts.; No. 2 concrete, 85 cts.; lay 6-in. hexagon bois d'arc blocks, $1.50 a sq. yd.; 7-in. hexagon bois d'arc blocks, $1.55, and 8-in. hexagon bois d'arc blocks, $1.60. Franklin Fireproofing Co., Dallas, asphalt pavement No. 3 on top of concrete foundations No. 1 or No. 2, $1.92. This company offered a 10 years' guarantee if paid $1.97 a sq. yd. Barber Asphalt Paving Co., New York, remove blocks, 5 cts. a sq. yd.; excavate, 5 cts. a cu. yd.; lay No. 1 concrete, 42 cts. a sq. yd.; No. 2 concrete, 50 cts.; lay No. 1 asphalt, $1.80; No. 4 asphalt mixture with No. 2 concrete, $2.12, the pavement to be 4 ins. of asphalt, 1 in. binder and 1½ ins. wearing surface. Brown & Dabney, Dallas, submitted bids on asphalt, vitrified brick and bois d'arc paving. For asphalt, grading, 30 cts. a cu. yd.; remove bois d'arc blocks, 6 cts. a sq. yd.; lay No. 1 concrete, 45 cts.; No. 2 concrete, 58 cts.; asphalt, $1.80 a sq. yd. For vitrified brick the bids for grading, removing blocks and laying concrete were the same, and to lay brick pavement, with No. 1 concrete surface, $1.82 a sq. yd.; with No. 2 concrete surface, $1.95. For bois d'arc pavement the bids for grading and removing blocks were the same. 6-in. hexagon bois d'arc blocks, $1.45; 7-in. hexagon bois d'arc blocks, $1.48, and 8-in. hexagon blocks, $1.51. They also offered to put in new bois d'arc at $1.17 and to resaw the old blocks to 6 ins. long and replace them at $1 a sq. yd. Ayers Asphalt Paving Co., Zanesville, O., excavating, 18 cts.; remove the old blocks, 10 cts. a cu. yd.; lay No. 1 concrete, 53 cts.; No. 2 concrete, 60 cts.; and No. 1 asphalt, $1.65. On pavement No. 4, being 4 ins. of concrete, 1-in. binder and 1¼ ins. top, concrete No. 1, 43 cts.; No. 2, 50 cts.; asphalt No. 4, $1.48 a sq. yd. All the bids are for a 5-year guarantee.

REPAIRING ASPHALT PAVEMENT.—Scranton, Pa.—We are informed that the following bids were received Nov. 17 in select council for repairing asphalt pavement: Jos. P. Phillips, Cy. Engr.; about 166,000 sq. yds. of asphalt pavement being out of bond at present:

	Repairing, etc., per annum, 10 yrs.	Resetting curb.	Redressing and resetting curb.	New curb.	Circular curb.	New pavement.
[1]‡Barber As. Pav. Co.	$17,520	$0.10	$0.25	$0.53	$0.90	$2.50
[2]Penn. As. Pav. Co.	$18,700	.10	.25	.55	.88	2.60
[3]George McDonald	0.15	.23	.28	.60	1.10	1.98
[4]Alcatraz Paving Co.	.11½	.15	.35	.57	.97	2.50

[1]New York; [2]Philadelphia, Pa; [3]Newark, N. J.; *lump sums; ‡awarded contract by the select council but not yet by the common council.

BRICK PAVING, ETC.—Indianapolis, Ind.—The following bids were received by the board of public works, Nov. 12, 1898, for brick paving in Miami St., from Delaware to Alabama St: W. C. Allen, brick, $1.23 a sq. yd.; W. H. Abbott, Poston blocks, $1.27; Daniel Foley, brick, $1.29; and Joseph Cooper, blocks, $1.31.——The following bids were also received for laying cement sidewalks in College Ave.: W. A. Bruce, 69 3-5 cts. (accepted); J. C. Veney, 71 cts.; Julius Keller, 71 cts.; W. C. Allen, 76 9-10 cts.; Rogers & Dunlop, 78 cts.; C. M. Kirkpatrick, 78 cts.; R. B. Drake, 79 cts.

COUNTY BRIDGES.—Council Bluffs, Ia.—The county supervisors last week let the following contract for building county bridges from April 1, 1899, to April 1, 1900, to C. E. H. Campbell, Council Bluffs, who holds the contract for the present year: Wooden pile bridges, $4.75 a lin. ft.; steel spans, 40, 45, 50 ft., $9 a lin. ft.; 55, 60, 65 ft. spans, $10 a lin. ft.; 70, 75, 80 ft., $12 a lin. ft.; 85 to 100 ft., $13 a lin. ft.; for combination spans on pile piers, 40, 45, 50 ft. spans, $7.50 a lin. ft.; 55, 60, 65 ft. spans, $8.50 a lin. ft.; 70, 75, 80 ft. spans, $9.50 a lin. ft.; 85 to 100 ft. spans, $12 a lin. ft.; 36-in. wrought iron cylinders, price per four cylinders, 14 ft., $5.50; 16 ft., $6.50; 18 ft., $7; 20 ft., $7.50; 22 ft., $8; for 24-in. wrought iron cylinders piers, price per four cylinders, 14 ft., $3.50; 16 ft., $4; 18 ft., $4.20; 20 ft., $4.80; 22 ft., $5. Repairs, oak piling furnished and driven, ten miles or less from Council Bluffs, 40 cts. a lin. ft.; over 10 and under 21 miles, 50 cts. a lin. ft.; 21 miles and over, 60 cts. a lin. ft. All piles 20 ft. and under are to be of red cedar.

LAYING WATER-PIPE.—Cincinnati, O.—We are informed that the following contract has been awarded to Geo. W. Murray, 531 Clinton St., Cincinnati: For laying water-pipe in Baltimore Ave, 3-in. pipe, 125 ft., 12½ cts. a ft.; 4-in. pipe, 200 ft., 12½ cts.; 6-in. pipe, 6,200 ft., 12½ cts.; total, $815.63. The highest bid was as follows, submitted by McCarren & Dowson, Hyde Park: 3 and 4-in., 24 cts.; 6-in., 25 cts.; total, $1,628. John D. Harris, Asst. Clk. Bd. Cy. Affairs; A. B. Rattermann, Pres.

CONDUIT EQUIPMENT.—Erie, Pa.—Bids were received by the council Nov. 18, 1898, for conduit equipment. The contract for underground work was awarded to Kraft & Walther, at 10½ cts., 9½ cts. and 8½ cts. a ft. of 3-in. duots in 3, 5, and 8-in. conduits; 22 cts. for iron pipe; $34, $24, and $11 for manholes, A, B and C, and $5 for each service box. B. J. Murphy, Mayer Bros. and Geo. B. Kelley & Co., of Chicago, were the other bidders and the proposals were quite close. For poles and wires there were bids from G. B. Kelley & Co., and from Kraft & Walther. This portion of the work was awarded to Kelley & Co., at $20 for 60-ft. poles; $18 for 50-ft. poles, and $1.25 for ten-pin cross arms.

BRICK PAVING.—Sistersville, W. Va.—The following contract for 539 sq. yds. of brick in paving Hill St., was awarded to W. F. Rice, as follows: Excavation, 20 cts. a cu. yd.; curbing, 24 × 5 ins., 40 cts.; curbing, 16 × 6 ins., 30 cts.; curbing, 20 × 5 ins., 40 cts.; paving with Spilman No. 2 brick, 79 cts.

INDUSTRIAL NOTES.

THE DICKSON MFG. CO., Scranton, Pa., is reported to have an order for 10 locomotives for the Santa Fe Pacific R. R.

THE BELKNAP MOTOR CO., Portland, Me., has elected the following officers: Pres. and Gen. Mgr., Geo. W. Brown; Treas., Chas. L. Baxter; Clk., Seth L. Larrabee.

THE MORRIS MACHINE WORKS, Baldwinsville, N. Y., has an order, according to reports, for 14 double-suction, centrifugal pumps of large capacity to be used on the Siberian & Manchuria R. R.

THE SAFETY APPLIANCE CO., LTD., Wentworth Bldg., Boston, has an order from the Canadian Pacific Ry. to place on its cars the former's equalizer, which is intended to prevent the sliding of wheels, the tilting of the truck frame and the surging of the car body.

C. L. BERGER & SONS, 9 Province Court, Boston, Mass., have succeeded the former firm of Buff & Berger, manufacturers of engineering and surveying instruments, at that address. Mr. G. L. Buff, of the old firm, has withdrawn, and Mr. C. L. Berger has associated himself with his sons, Messrs. W. A. and L. H. Berger. The firm will continue the manufacture of mathematical and astronomical instruments.

THE STIRLING CO., Pullman Bldg., Chicago, has acquired all the patents, rights, etc., heretofore owned by the Cramp Co., Philadelphia, covering water-tube boilers for marine purposes, viz., the Niclausse, Yarrow and Mosher patents, and has entered into a contract with the latter company to manufacture all boilers that it may require for a period of years. The first order under the contract is for about 35,000 HP. for Russian warships, now under construction at the Cramp yards in Philadelphia. The company also proposes to introduce the boilers in merchant vessels. The manufacture and sale of marine boilers will not interfere with the regular business of the Stirling boiler, which will be made for stationary purposes as before. The officers of the company are: Pres., O. C. Barber; Vice-Pres., J. K. Robinson; Treas., E. R. Stettinius, and Supt., H. S. Pell.

THE HARRISBURG FOUNDRY & MACHINE CO., Harrisburg, Pa., is about ready to enlarge its plant. Five acres of land have been purchased between 7th and Emerald Sts., alongside of the Pennsylvania R. R., on which will be built a brick and steel building, 140 × 260 ft. Contracts for this work are about to be let, and it is expected to have a portion of the new plant occupied and in operation by March 1, 1899. The present plant, which has been occupied over 30 years, will be gradually abandoned. The new plant will contain two 200-HP. high-pressure boilers and a four-valve, tandem compound Harrisburg Standard engine of the company's manufacture, directconnected to dynamos of 40 to 50 K-W. capacity each. The building will be arranged for the transmission of both electric and steam power, and will have two 20-ton electric cranes, one each in the machine shop and in the foundry. The foundry will be 90 × 100 ft., and the machine shop, 50 × 122 ft., adjoining a 45 × 45-ft. smithy. In the yard will be a 15-ton radial crane swinging in a 90-ft. circle. There will also be a 45 × 50-ft. pattern shop and a 30 × 75-ft. pattern storage room. The plant will be supplied with artesian wells and with a complete system of drainage. It is estimated that the plant will cost fully $200,000. The business of the company has increased 30% over 1897, the annual output aggregating about 230 engines. The company has orders at present for 40 or 50 engines, and has built since 1883 2,500 engines aggregating 300,000 HP. Mr. Wm. R. Fleming is the Vice-President and General Manager of the company.

NEW COMPANIES.—New York & New Jersey Land & Development Co., 243 Washington St., Jersey City., N. J.; $125,000, with all paid in; to improve, irrigate and reclaim lands, etc.; Chas. N. Conklin, Chas. N. King and Al McMahon, all of Jersey City.

Arion Mfg. Co., Boston, Mass.; $100,000, commencing with $200; to manufacture and sell brass, iron, nickel, etc.; A. W. Ottignon, Wm. P. Morse, Wm. S. Jones and Allen C. Goss, all of Boston; Jos. W. Green, Providence, R. I.

Supreme Stove & Furnace Co., 45 Stuben St., East Orange, N. J.; $300,000, commencing with $1,000; to manufacture furnaces, stoves, etc.; John E. Wheeler, East Orange; A. F. Denniston and Charles Warburton, of New York; Robert L. Braekett, Bensonhurst, Brooklyn, N. Y.

W. M. Pawley, 166 Main St., Asbury Park, N. J.; $25,000, commencing with $2,600; to manufacture hardware, plumbing material, etc.; Wm. M. Pawley and Elva F. Pawley, Asbury Park; Annabelle Kent, East Orange, N. J.

Columbia Filter Co., Camden, N. J.; $30,000; to manufacture water filtering apparatus; Thomas D. Finletter, Walter C. McAdoo and Thomas L. Mattson, 419 Market St., Camden, N. J.

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